

THE TIMES AND REGISTER.

A Weekly Journal of Medicine and Surgery.

Published under the auspices of the American Medical Press Association.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.

Vol. XXII. No. 6.
Whole No. 648.

NEW YORK AND PHILADELPHIA, FEBRUARY 7, 1891.

{ Yearly Subscription \$3.00,
in advance.
Single Numbers 10 cents.

ZENTMAYER'S * MICROSCOPES

Are KNOWN the WORLD OVER as the BEST MADE.

MANUFACTURED BY

JOSEPH ZENTMAYER, Optician,

* NO. 209 SOUTH ELEVENTH STREET, PHILADELPHIA, PENNSYLVANIA. *

ALL KINDS OF REPAIRING DONE.

ZENTMAYER'S MODIFIED ABBE CONDENSER.

RYDER'S AUTOMATIC MICROTOME.

CATALOGUE ON APPLICATION.



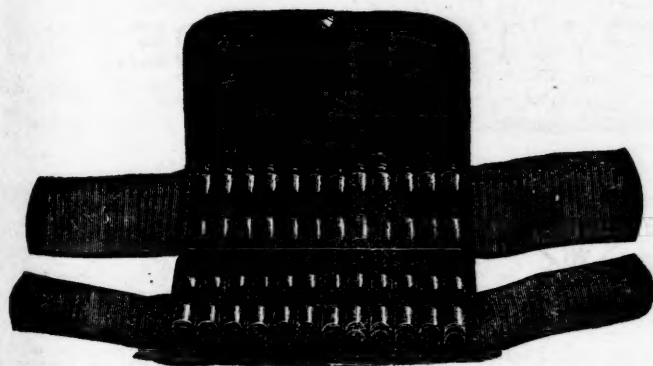
Am'n Histological Stand Complete, \$65.00

American Student Stand Complete, \$38.00

Electro representing
No. 38 of Catalogue.

DOCTOR, THIS WILL INTEREST YOU!

THAT you may become acquainted with the merits of our preparations, we will furnish you, for \$3.00, with a handsome, double morocco pocket case, containing 24 vials, filled with the following complete assortment of tablets and Triturates:



No. 2. Size, $7\frac{1}{4} \times 3\frac{3}{4} \times \frac{1}{2}$ inches. Price, \$3.00.

Tr. aconite, $\frac{1}{4}$ minim.
Tr. belladonna, 2 minim.
Nitro Glycerine Comp. (M. & Co.'s).
Cascara com. (M. & Co.'s).
Ammon. Mur. comp.
Calomel, 1-10 grain.
Calomel 2-grains.
Calomel, ipecac and soda bicarb. No. 1.
Dover's Powder, $\frac{1}{4}$ grains.
Fever (Dr. T. G. Davis).
Hydrarg. Iodide Virid, $\frac{1}{4}$ grain.
Iron, Arsenic, and Strychnia.
Hypophos Quinia comp. Creasote.
Acetanilid, 2 grains.
Morphia Sulph., 1-6 grain.
Zinc Sulpho-carb., 1 grain.
Acid Arsenious, 1-60 grain.
Potass. Chlor. Comp.
Bismuth et Cerii Oxalat
Kermes Mineral Comp.
Paregoric, 10 minim.
Strychnia, 1-60 grain.
Quinia sulph., 1 grain.
Corros. Sublimate, 1-40 grain.

We would call especial attention to our Tablets Hypophos, Quinia Comp. cum Creasote, which are superior to syrups and solutions, owing to absence of sugar and free acid!

H. K. MULFORD & CO.

Factors of Compressed Goods and Pharmaceutical Preparations,

PHILADELPHIA.

Write for Complete List,
mentioning this journal.

Published by the Medical Press Company, Limited, 1725 Arch Street, Philadelphia, Pa.
Agents in Paris: E. Besnee, 19 Rue Vaneau. Entered at the Philadelphia Post Office as second-class mail matter.



THE

NEW YORK CHEMICAL COMPANY,

OFFICES, 112 & 113 PULITZER BUILDING, NEW YORK,

WILL OCCUPY THIS SPACE.





ALL WOOL

ENGLISH

CHEVIOT SUITS,

Made up in Cutaway Coat Style (as shown here),

PRICE, \$20.00.

Those living at a distance should write for samples of material and directions "How to Order by Mail."

ESTABLISHED AT

908 Walnut Street, - - - Philadelphia.

245 Broadway, - - - - - New York.

344 Washington Street, - - - Boston.

E. O. THOMPSON,
MERCHANT TAILOR, CLOTHIER, IMPORTER,
1338 Chestnut St., Philadelphia.

Eugene K. Plumly,
211-213 Church St., Philadelphia.

MANUFACTURER OF

PAPER BOXES.

Druggists' and Manufacturing
Chemists' work a Specialty.

COMPLETE MAIL LIST of all the **PHYSICIANS** in the U. S.
GEO. F. LASHER, PUBLISHER AND PRINTER,
1213 and 1215 Filbert Street, Philadelphia, Pa.
WRITE FOR CIRCULAR GIVING FULL PARTICULARS.
Addressed Wrappers, size 10 x 10 inches, per 1000, \$1.00.
Addressing Envelopes, when furnished, - per 1000, .75.
In Book Form, about 5000 names each, - per book, 1.00
PHYSICIANS send your address on postal card for insertion
to Geo. F. Lasher, 1213-15 Filbert Street, Philadelphia, Pa.

PROF. S. ASHER,

Teacher of **FASHIONABLE DANCING,**

Katatorium Hall, Broad Street, below Walnut, Philadelphia.

Being a member of the Society of "Professors of Dancing," of New York City, enables me to introduce all the Latest Fashionable Dances as taught and danced in New York and Eastern Cities.

CLASS ARRANGEMENTS.

For Ladies and Gentlemen.—Tuesday and Thursday evenings, from 7 until 10 o'clock.

Private class for Ladies and Gentlemen now forming.

For Misses and Masters.—Wednesday and Saturday afternoons from 3 until 5 o'clock. Classes always open for beginners.

Special arrangements made for private classes in or out of the City.

All the fashionable dances, including the Glide, Heel-and-Toe, Glide Polka, Varsovienne, Schottische, Minuet, German, etc., taught by an original method. Glide Waltz a Specialty, and taught in 3 to 5 private lessons.

Classes for Young Ladies, Misses and Masters, every Saturday morning from 10 to 12.

Private class for Children (4 to 6 years) a Specialty, Class for Young Ladies every Wednesday, from 5 to 6.

Private lessons any hour, day or evening, to suit the convenience of the pupil. Personal attention given to classes at Residences, Seminaries, in or out of the city, at reasonable terms.

HOME FOR HABITUÉS.

OPIUM, CHLORAL, COCAINE.

DR. J. B. MATTISON

Continues to receive at his residence, 314 State Street, Brooklyn, N. Y., a limited number of these Habitués, to whom he devotes his exclusive professional attention.

PATIENTS, SIX, AND SELECT.

Attractive apartments, liberal cuisine, desirable privacy, cheerful society and personal professional attention based on several years' experience in the treatment of this disease.

FOR DETAILS SEE THIS JOURNAL, OCTOBER 4, 1890.

PHYSICIANS: Are you in need of anything, if so write to
THE PHYSICIANS SUPPLY CO.

Notes and Items.

If Diogenes had lived to-day he would have solved the honest-man problem by buying a mirror.

SAPPY: "Very few people get what they deserve in this world."

Miss Castique: "Aren't you glad?"

It was a representative of the variety branch of the theatrical business who referred to the old-time circumnavigators as all around artists.—*Washington Post*.

"WHERE'S the proprietor?" asked a man, as he entered a down-town restaurant.

"He's gone home to dinner, sir," replied a waiter.

MRS. HONEYTON: "Are those some of the cigars I gave you?"

Honeyton: "Yes."

Mrs. Honeyton: "How are they?"

Honeyton: "They are of the kind that it is better to give than to receive."—*Harper's Bazar*.

LONDON, N., ENGLAND, July 8, 1890.
10 Baalbec Road, Highbury.

Jerome Kidder Mfg Co.

GENTLEMEN: * * * I purchased another from a person in Liverpool, both machines being No. 5, in your catalogue. I confidently say that for smoothness and evenness of current, range of effects, and perfect action, they far excel any apparatus in the market, England or foreign. * * *

Yours faithfully,

A. T. KING, M.E.

STAMMERING

And all nervous affections of speech thoroughly corrected. Established 1879. Pupils sent us by Drs. Hammond, Seguin, Lusk, and other specialists. Younger pupils pursue ordinary studies, Book-keeping, Stenography, etc., while under treatment. Pamphlets with rules, exercises, illustrations, suggestions, and testimonials from eminent men and pupils, free.

The Bryant School for Stammerers, 9 W. 14th St., N. Y.

THE CHAMPION TRUSS

Stands at the Head. It Leads. Others Follow.

AWARDED
GOLD MEDAL.
NEW ORLEANS EXPOSITION,
1885.



AWARDED
SPECIAL MEDAL.
CENTENNIAL EXHIBITION,
1886.

The Best, Safest and Easiest Truss to Fit and Wear is the

CHAMPION TRUSS.

Manufacturers of Genuine Hard Rubber and all kinds of Spring and Elastic Trusses, Abdominal Supporters, Elastic Stockings, Shoulder Braces, Suspensory Bandages, and Headquarters for Crutches.

Importers and Jobbers of ENGLISH DRESSED CHAMOIS SKINS.

Philadelphia Truss Co., 610 Locust St. Phila., Pa.
For Sale by all Leading Drug and Surgical Instrument Houses through out the United States. Price List and Catalogue on application.

BURN-BRAE.

A Private Hospital for Mental and Nervous Diseases.

FOUNDED BY THE LATE ROBERT A. GIVEN, M.D., 1859.

Clifton Heights, Delaware Co., Pa.

MEDICAL SUPERINTENDENTS:

J. WILLOUGHBY PHILLIPS, M.D., S. A. MERCER GIVEN, M.D.

A SPECIALTY

FRAMING DIPLOMAS.

E. BENNETT, 4079 Lancaster Ave., Phila.

Refer by permission to the Editors of this Journal. Orders by mail.

ANTISEPTIC DRAINAGE TUBES.

GLASS.



MADE AFTER PATTERNS FURNISHED BY PROF. S. W. GROSS.

These tubes have large holes, one-half inch apart, arranged alternately on opposite sides.

They are carefully finished, especial care being taken to make them smooth.

In addition to the drainage holes each tube has at one end two smaller holes, for the insertion of Safety Pin, through which it is prevented slipping into the wound.

FURNISHED IN SEVEN SIZES.

No. 1, Length 63 mm., Diameter 7 mm., 4 Holes	-	-	-	-	\$1 25 per dozen.
No. 2, " 63 " " 8 " 4 "	-	-	-	-	1 25 "
No. 3, " 76 " " 9 " 5 "	-	-	-	-	1 40 "
No. 4, " 88 " " 9 " 6 "	-	-	-	-	1 55 "
No. 5, " 102 " " 9 " 7 "	-	-	-	-	1 70 "
No. 6, " 114 " " 9 " 8 "	-	-	-	-	1 90 "
No. 7, " 126 " " 10 " 9 "	-	-	-	-	2 10 "

RAW CAT-GUT.

Prof. Gross stated at one of his Surgical Clinics in the Jefferson Medical College Hospital, that he had just concluded a series of experiments with cat-guts obtained from different sources; and that the article which I now offer for sale, he considered superior to all others. I put this up in coils of 10 feet, four different sizes, Nos. 1, 2, 3, 4 (four is thickest). Nos. 2 and 3 are the most useful sizes.

No. 1 coil 10 cents; No. 2 coil 12 cents; No. 3 coil 14 cents; No. 4 coil 16 cents.

Full descriptions with each coil for making it absolutely aseptic.

THE VARIOUS INSTRUMENTS AND APPLIANCES DEvised BY DR. R. J. LEVIS kept constantly in stock the original models having been manufactured under the personal direction of Dr. Levis.

Purchasers can rely upon their accuracy.

Special attention given to the fitting up of Hospitals with Operating Tables, Ward Carriages, Instrument Trays, and the different appliances for antiseptic surgery.

WILLIAM SNOWDEN,

Manufacturer, Importer and Exporter of Surgical Instruments,

(Please mention The Times and Register.)

No. 121 South Eleventh Street, Philadelphia, Pa.

RESTORATIVE WINE OF COCA.

For Nervous Prostration, Brain Exhaustion, Neurasthenia, and all forms of Mental and Physical Debility.

This WINE OF COCA is so prepared that it contains the active principle of the leaves in a perfectly pure form. Moreover, it is absolutely free from all those foreign substances which all other wines of coca contain, and which interfere, to a great extent, with its curative influence. It is well known that the cocaine contained in the coca-leaves varies considerably in its proportion; hence, giving to the wines as ordinarily made uncertain strength, and causing them to be unreliable in their action on the system. In the RESTORATIVE WINE OF COCA the proportion of alkaloid is invariable, and the physician can, therefore, prescribe it with the certainty of obtaining uniform results.

Prof. WM. A. HAMMOND, M.D., says: A wineglassful of this tonic, taken when one is exhausted and worn out, acts as a most excellent restorative; it gives a feeling of rest and relief. I have discarded other wines of coca and used this alone. It produces also excellent results in cases of depression of spirits; in hysteria, headache, and in nervous troubles generally it works admirably. It is a simple remedy, yet efficacious and remarkable in its results.

Each pill contains the one-sixth of a grain of the Hydrochlorate of Cocaine, two grains of the Sulphate of Quinine, and two grains of Acetanilide.

"Febricide" will be found to be possessed of great curative power in Malarial affections of any kind, and in all inflammatory disease of which Fever is an accompaniment. For Neuralgia, Muscular Pains, and Sick Headache, it is a Specific.

Prof. WM. F. WAUGH, M.D., of Philadelphia, writes: In a case of persistent neuralgic headache, worse on awakening, with a possibility of malaria, "Febricide" gave instant relief.

No. 100 W. 7th STREET, CINCINNATI, O., Nov. 9, 1889.

On November 6th I was called in consultation to see Mr. W., who was suffering from the most violent attack of ASTHMA, the paroxysm so frequent that suffocation seemed only a matter of a little time. We gave him one "FEBRICIDE PILL" and ordered one every two hours; ordered hot mustard foot-bath; his doctor remained with him. I returned per request in seven hours; to my surprise, he was breathing, talking, and, as he informed me, felt first-rate.

DR. D. W. MCCARTHY.

I have used your FEBRICIDE with excellent results in our Mountain Fevers (typhoid), reducing, in one case, the temperature from 104½ with dry brown furried tongue in ten hours, to 99½, with tongue cleaning promptly and moist, and rapid improvement dating therefrom. Have used Antipyrine in similar cases with no good results.

SPRINGVIEW, N.E., November 25, 1889.

ALBERT S. WARNER, M.D.

Containing Sulphate of Soda, Carbonate of Soda, Phosphate of Soda, Chloride of Sodium, Sulphate of Lime, Sulphate of Magnesia, and Carbonate of Lithia. For Habitual Constipation, Rheumatic and Gouty Affections, Biliousness, Corpulence, Dyspepsia, and all Derangements of the Digestive Tract, it is a wonderful remedy. Does not gripe after administration.

GRAND RAPIDS, MICH., October 8, 1889.

"Febricide Pills" have been used in a case of CHILLS from SEPTIC POISONING and worked to perfection, as they stopped them entirely where ordinary QUININE HAD FAILED. Also kept down the temperature.

O. E. HERRICK, M.D.

Samples will be sent free of charge to any Physician who may wish to examine the same.

HEALTH RESTORATIVE CO., 10 West 23d St., New York.

WALNUT LODGE HOSPITAL

Hartford, Conn.

Organized in 1880 for the special medical treatment of

ALCOHOL AND OPIUM INEBRIATES.

Elegantly situated in the suburbs of the city, with every appointment and appliance for the treatment of this class of cases, including Turkish, Russian, Roman, Saline and Medicated Baths. Each case comes under the direct personal care of the physician. Experience shows that a large proportion of these cases are curable, and all are benefited by the application of exact hygienic and scientific measures. This institution is founded on the well-recognized fact that Inebriety is a disease, and curable, and all these cases require rest, change of thought and living, in the best surroundings, together with every means known to science and experience to bring about this result. Only a limited number of cases is received. Applications and all inquiries should be addressed

T. D. CROTHERS, M.D.,

Sup't Walnut Lodge, Hartford, Conn.

GONORRHOEA

GONORRHOEA, GLEET, and all other urethral diseases, can be most successfully treated by using Soluble Medicated Bougies. A compact little pamphlet of 24 pages, on "THE TREATMENT OF GONORRHOEA AND ITS SEQUELÆ," by means of medicated bougies, containing many valuable hints on treatment, will be sent free, together with samples of the bougies, to any physician who will mention THE TIMES AND REGISTER, and enclose his business card or letter heading.

Address, **CHARLES L. MITCHELL M.D.**
Manufacturer of Soluble Medicated Gelatine Preparations,
1016 Cherry Street, Philadelphia.

MEDICO-CHIRURGICAL COLLEGE OF PHILADELPHIA.

The Regular Session begins October 1, 1890, and continues until the middle of April. It is preceded by a Preliminary Session of three weeks and followed by a Spring Session lasting until the middle of June.

Seats are issued in the order of matriculation, and are forfeitable if fees are not paid before November 1.

Preliminary examination, or equivalent degree and three years graded course, obligatory.

Instruction is given by lectures, recitations, clinical teaching, and practicable demonstrations. In the subjects of Anatomy, Pharmacy, Physiology, Hygiene, Therapeutics, Histology, and Pathology, the usual methods of instruction are largely supplemented by laboratory work.

Examinations are held at the close of each Regular Session upon the studies of that term. Although the degree of Doctor of Medicine is conferred at the end of the third year, a fourth year is earnestly recommended, at the end of which the degree of Doctor of Medicine cum laude is given.

FEES.—Matriculation, \$5; first and second years, each, \$75; third year (no graduation fee), \$100; fourth year free to those who have attended three Regular Sessions in this school, to all others, \$100. Extra charges only for material used in the laboratories and dissecting-room. For further information or announcement address, E. E. MONTGOMERY, M.D., Secretary, Medico-Chirurgical College, Cherry St., below 18th St., Phila., Pa.

Exercise not for strength but for health.—Isocrates.

NINTH SEASON.

SANATORY GYMNASIUM—SARGENT SYSTEM,

1420 CHESTNUT STREET, PHILADELPHIA.

TO THE PROFESSION: I shall be glad to take charge of any of your patients, whom you may wish to take physical exercise for the treatment of chronic heart or lung disease, a disordered liver, constipation, dyspepsia, insomnia, chorea, rheumatism, paralysis, spinal curvature, or any acquired physical deformity. Respectfully,
W. A. FORD, M.D.

REFERENCES BY PERMISSION: D. HAYES AGNEW, M.D., J. M. DACOSTA, M.D., DEFOREST WILLARD, M.D.

THE PHYSICIANS SUPPLY CO.

218 EAST 34TH STREET

NEW YORK.

GEO. WHARTON McMULLIN, Manager.

ALCOHOL INSIDE OUT. By Dr. E. Chenery, Boston, Mass. Cloth, Price, \$1.50, postpaid.

ROHRER'S CHART OF DISEASES OF THE EAR. Price, 10 cents each. \$1.00 per 100, in tablets.

SHOEMAKER ON SKIN DISEASES. Cloth, Price, \$5.00.

PURCHASING AGENCY for articles required by the Physician.

AN EXCELLENT URINOMETER. Price, \$1.00.

ON SALE.—Trommer's Physicians' Duplicating Prescription Blanks.

WOOD'S MEDICAL LIBRARY.—A full set of 36 volumes (1879-80-81). Volumes look almost new. Will sell for \$25.

WHAT TO DO IN CASES OF POISONING. By Dr. Wm. Murrell, of London. Edited by Frank Woodbury, M.D. Cloth, Price, \$1.00, postpaid.

PRACTICAL ELECTRO-THERAPEUTICS. By Wm F. Hutchinson, M.D. Cloth, Price, \$1.50, postpaid.

MANUAL OF GYNCOLOGICAL OPERATIONS. By J. Halliday Croom, M.D., F.R.C.S., Ed. Revised and Enlarged by L. S. McMurtry, A.M., M.D. Cloth, Price, \$1.50, postpaid.

A CHEAP FOUNTAIN PEN. Price, 50 cents, postpaid.

A GOOD RELIABLE AND HANDY HYPODERMIC SYRINGE. Price, \$1.50, postpaid.

AN EXCELLENT AND ACCURATE CLINICAL THERMOMETER. Price, \$1.50, postpaid.

ON SALE.—JEROME KIDDER AND BARRETT BATTERIES.

EARTH IN SURGERY (Second Edition). By Addinell Hewson, M.D. Cloth, Price, \$1.00, postpaid.

LESIONS OF THE VAGINA AND PELVIC FLOOS. By E. Hadra, M.D. Cloth, Price, \$1.75, postpaid.

THE DERMATOGRAPH. Price, 25 cents, postpaid.

WANTED.—\$50.00 will be given by regular physician of seven years' practice (three in public and private insane asylums), to person who secures for him a satisfactory position, in or near New York City preferred as assistant in public or private asylum, or as partner or assistant to physician with large practice. Best of reference given and required. Address, "GOVERNMENT PHYSICIAN," Physicians Supply Co.

LADIES: New Medical Guide, by Drs. Pancoast and Vanderbeek. Cloth, price, \$2.50 postpaid. A valuable book for every woman.

A PHYSICIAN, who wishes to investigate homœopathy, desires to exchange for the following books: Arndt's System of Medicine, Ackford's Hand-Book of Homœopathic Practice, Hughes' Salient Materia Medica or Hahnemann's, Durham's Lectures.

FOR SALE.—An established practice and corner drugstore, in a growing town of 2,000 to 3,000 population, but one other doctor and drugstore; fifteen miles from Philadelphia, on Main Line of R. R. Price for all, including office furniture, \$1,100.00. This is a good chance for a live man. Address PHYSICIANS SUPPLY CO.

THE SELF-LIGHTING POCKET LAMP. Price, 50 cents, postpaid.

VACCINE VIRUS on sale at regular rates, both Human and Bovine.

FOR SALE.—A New "ALLEN SURGICAL PUMP," for \$18; Cost \$25. C. E. Marlette.

FOR SALE OR EXCHANGE.—Complete Oxygen and Nitrogen Mon-oxid Apparatus for office use—cost over \$100—Price, \$70. Good as new. Also a History of Rome, 6 large volumes, cost about \$100, more than 150 years ago. Also, one Best Morocco Buggy Case, 14x9½x9½, containing 44 glass-stoppered bottles, 4 jars, mortar and pestle, tray for scales, and space for instruments. Cost \$21; will sell for \$10. Good as new.

ON SALE.—An "Allen Surgical Pump." Worth \$25 will sell for 20.

FOR SALE.—A good average one-man practice, village and country, on Branch of P. R. R.; no other doctor; will take \$300 cash for practice and lease of house until July 1, 1893.

MICROSCOPE.—nearly new. Cost \$8.00; will sell for \$5.00. Also lot of physician's instruments, at reduced prices. Phys. Supply Co.

FOR SALE.—A practice of \$1200 to \$1500 (can be greatly increased) in a good railroad town in central Illinois, good country, no opposition good pay. Good, new and desirable property worth \$1000. Price for all, \$1000.

For terms, and reasons for selling, address, C. E. M. Care Physicians Supply Co.

WANTED to purchase good-will of a practice of over \$2,500 a year, in a R. R. Village of 800 to 3,000 inhabitants, New England or Middle States preferred. "Would take charge of a practice for 3 or 4 months."

Address, with full particulars, X. L. Care Physicians Supply Co.

PHYSICIAN'S Business and Residence for Sale.—Business established twelve years, one of the finest towns of its size in central Ohio, 30 miles from Columbus, 1,000 inhabitants, High School, two railroads, new two-story house, nine rooms and cellar, modern style, and very convenient; fine large barn, half-acre lot, stone walks to all out-buildings, grass lawn of ¼ acre.

Price, \$1,875, covered by fire insurance; \$1,000 cash, balance in payments to suit. Best practice in town, but must leave on account of wife's health. Address, TIMES AND REGISTER. (Business \$2,000 per year).

FOR SALE.—Wishing to return to the practice of dentistry, I will sell my practice and good will for \$150.00, to a physician who will buy out my office furniture and stable equipments, including horse, platoon, harness, etc., at their actual value. Good practice, established eight years. In community of 2,500 population; with but one other M.D. This is a big bargain. Located in New Jersey, with easy access to Philadelphia, Pa. Address, Physicians Supply Co.

ON SALE.—THE SILVER SPIRIT LAMP. Price, 60 cents.

JOHNSON & JOHNSON'S ANTISEPTIC DRESSINGS on sale.

FOR SALE.—Will sell for \$35.00, the following books—perfectly new—bound in cloth—cost \$46.00: 1 set of Cyclopaedia of Obstetrics and Gynecology, XII vols. (Wm. Wood & Co., Publishers, 1887); 2 sets (1888 and 1889) of Annual of the Medical Sciences, Sajous, five volumes each, (F. A. Davis, Publisher) Address, G. P. Marner.

WANTED to buy a practice in New England; write, stating particulars and price, to W. M. K., care Physicians Supply Co.

FOR SALE.—Books of a physician lately deceased. Send for circular.

TERTIARY SYPHILIS.

"Your preparation, IODIA, is an excellent alternative, and is the most agreeable of any preparation of Iod. Potas., as it does not cause the cramps in stomach, which are often intolerable.

"I have employed IODIA in two cases of Tertiary Syphilis, in which, after five weeks' treatment, the manifestations disappeared.

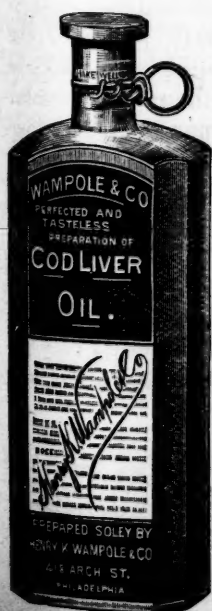
"In a case of Syphilitic Eczema it was also successful."—DR. SAM PETITEAU, Garches, France, Nov. 10, 1890.

✦ **BATTLE & CO., Chemists' Corporation,** ✦
ST. LOUIS, MO., U. S. A.

BRANCHES:

76 New Bond Street, London, W.
5 Rue de la Paix, Paris.
9 and 10 Dalhousie Square, Calcutta.
80 Montague-de-la-Cour, Brussels.
28 Nieuwe Hoogstraat, Amsterdam.

Wampole's Perfected and Tasteless Preparation of Cod-Liver Oil.



Combined with Extract of Malt, Fluid Extract of Wild Cherry Bark and Syrup Hypophosphites Compound (containing Lime, Soda, Potassium, Iron, Manganese, Quinine, and Strychnia).

Containing the curative agents from 25 per cent. Pure Norwegian Cod-Liver Oil. Rendered pleasant and agreeable by the addition of choice Aromatics. For full directions, see circular surrounding bottle.

We invite your attention to the "fac simile" of an Analysis made by Charles M. Cresson, M.D., certifying to the value and efficacy of this Preparation, and which we have printed on the back of our circular.

NUTRITIVE.

TONIC.

STIMULANT.

Put up in 16-ounce bottles, full measure, \$8.00 per dozen, net.

Put up in 5-pint bottles for convenience in dispensing, and as a regular stock bottle. 5-pint bottles, each \$3.00, net.

Wampole's Concentrated Extract of Malt	• • •	\$2.00 per doz.
" Syrup Hypophosphites Compound	• • •	\$3.50 per 5-pint bottle.
" " Hydriodic Acid	• • •	\$8.00 per doz. in lb. bottles.
" Granular Effervescent Salts.		

HENRY K. WAMPOLE & CO.,

(Please mention The Times and Register)

418 ARCH STREET, PHILA.

An Open Letter to the Medical Profession.

THE INFANT FOOD PROBLEM SOLVED.

NEW YORK, May 1, 1890.

The Annual of the Universal Medical Sciences for 1889, says: "A perfect Infant Food is still a desideratum; such a food will probably be evolved in the mind of some manufacturer who understands the physiology of infantile digestion and the chemistry of milk. A substitute for human milk, to approximate the latter closely, should be made entirely from cow's milk, without the addition of any ingredient not derived from milk."

"But not alone do we demand that these Milk Foods contain the equivalent of the solids in human milk, and especially of the albuminoids derived from milk, but that the latter be gathered with the utmost care from properly fed animals, transported with the least possible jolting to the factory, maintained during its transit at a low temperature, then transferred to an apparatus for sterilization, and immediately after the latter has been accomplished reduced to the dry state, in order to prevent the formation of those organisms which Loeffler, Pasteur, and Lister have found to develop in fluid milk after boiling under an alkaline reaction. If such a preparation be put into air-tight and sterilized jars, all will have been accomplished that can be done to render the food sterile, and thus fulfil the chief indications in the prevention of the most serious gastrointestinal derangements."

"Such a food, too, would have the advantage of being easily and rapidly prepared by addition of sterilized water, affording an altogether sterilized food."

To the Medical Profession at large, we submit for examination and trial the perfect Milk Food known as LACTO-PREPARATA. We claim that LACTO-PREPARATA is an ideal Infant Food, and that it fulfils the above requirements in every particular, except the partial substitution of cocoa-butter for unstable milk-fat. This substitution was made by advice of Prof. Attfield, London, who made extensive tests of its food value and digestibility in the London Hospitals for Infants.

LACTO-PREPARATA is made from cow's milk evaporated in vacuo a few hours after it leaves the udder. In order to have the product correspond in composition with breast-milk, sufficient milk-sugar is added to bring up the carbohydrates and reduce the albuminoids to a proper proportion (17 per cent.). The casein is partially predigested (30 per cent.), and the remaining portion is rendered like human milk in character and digestibility. The ingredients are perfectly sterilized and placed in hermetically sealed cans; the powdering, bolting, and canning are done in an air-tight room, all air entering and leaving this room is forced by a blower through heavy layers of cotton. LACTO-PREPARATA is adapted more especially to infants from birth to six months of age; and by the addition of water alone represents almost perfectly human milk in taste, composition, and digestibility.

Another product of our laboratory, which has been before the profession for a number of years, is CARNRICK'S SOLUBLE FOOD, which, as now prepared and perfected, contains 37½ per cent. of the solid constituents of milk, 37½ per cent. of wheat with the starch converted into dextrine and soluble starch, and 25 per cent. additional milk-sugar. For infants over six months of age it is perfect in every respect; for infants younger than this, LACTO-PREPARATA is more suitable, although Soluble Food has also been used largely from birth with most satisfactory results.

Samples will be sent prepaid, also pamphlet giving detailed description.

REED & CARNRICK,
NEW YORK.

THE



KING

OF TABLE WATERS.

Underwood Spring Water

ITS DAILY USE PREVENTS

BRIGHT'S DISEASE,

AND CURES

Dyspepsia, Rheumatism, Gout, Gravel, and Diseases of
the Kidneys and Liver.

Ample evidence of the truth of the claims, *made by the most Eminent Physicians of America*, for the efficacy of the Underwood Spring Water as a remedial agent, will be furnished upon application to the Company.

The Water is for sale by all First-class Druggists and Grocers, put up in

CASES OF 50 QUART BOTTLES.

" " 100 PINT "

Charged with Natural Carbonic Gas or Still.

Specify in ordering—Charged or Still.

THE UNDERWOOD COMPANY,

FALMOUTH FORESIDE, MAINE, U. S. A'

SANITAS

Antiseptics, Disinfectants, and Oxidants.

"SANITAS" IS PREPARED BY OXIDISING TERPENE IN THE PRESENCE OF WATER WITH ATMOSPHERIC AIR.

"SANITAS" DISINFECTING FLUID.

An aqueous extract of Air Oxidised Terpene. Its active principles include Soluble Camphor ($C_{10}H_{16}O_2$) Peroxide of Hydrogen and Thymol.

"SANITAS" DISINFECTING OIL.

Air Oxidised Terpene. Its active principle is Camphoric Peroxide ($C_{10}H_{16}O_4$) a substance which produces Peroxide of Hydrogen when placed in contact with water or moist surfaces (wounds, mucous membranes and other tissues).

"Sanitas" is Fragrant, Non-poisonous and does not Stain or Corrode. It is put up in the form of FLUIDS, OIL, POWDERS & SOAPS.

For Reports by Medical and Chemical Experts, Samples, Prices, etc., apply to the Factory,

626 638, 640 & 642 West 55th Street,
NEW YORK.

WATCHES

An inquiry for a cheap but really reliable watch, for the use of physicians, has resulted in the following

SPECIAL OFFERS

1. An American Movement: stem-winder and setter, nickel case
With Times and Register \$5.00 7.00
2. A similar watch, with better movement: Elgin or Waltham; nickel case, stem-winder and setter, With Times and Register \$8.00 10.00
3. An American Movement: stem-winder and setter; nickel case; sweep second hand \$9.00 11.00
With Times and Register 11.00

This is the best value we can give.

The sweep-second is of great value, as the pulse can be taken so much more easily than with the ordinary small second hand.

These are all open-face. The movements are so good that the purchaser will be surprised at receiving so good an article for so little money.

If any of them prove unsatisfactory, will take them back and refund the money within a reasonable time.

THE MEDICAL PRESS COMPANY, LIMITED,
SUBSCRIPTION DEPARTMENT,

1725 Arch St., Phila., Pa.

PHYSICIANS' FAVORITE PHAETON,

Guaranteed to be Absolutely Free from Horse Motion or Weight on Animal.

THE CHADWICK TWO WHEELER.

For Physicians' use it is indispensable, as it rides over COBBLE PAVEMENTS or FROZEN RUT ROADS with the greatest ease.

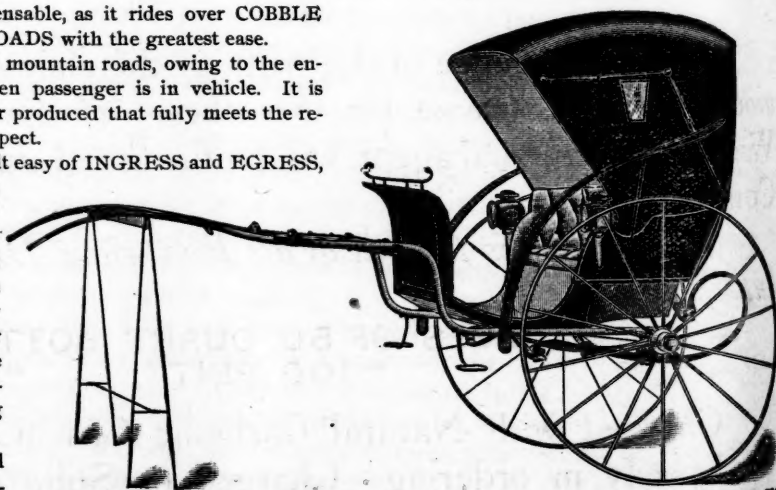
It is especially adapted to hilly or mountain roads, owing to the entire absence of weight on animal when passenger is in vehicle. It is entirely new and the only vehicle ever produced that fully meets the requirements of a physician in every respect.

The low hang of the body renders it easy of INGRESS and EGRESS, thus overcoming one of the most monotonous parts of the physicians' practice. In the upholstery of the seat and back, it affords the greatest luxury. Has regular Physician's Close Top, with large side lights, stationary storm apron on dash, large drawer under seat for instruments or medicine case, and is furnished with large serviceable French Cylinder, oil burning reflector lamps when desired.

Built with pole for team, instead of shafts when desired, as in the absence of weight on animal, it is the **Most Perfect, Stylish, and Easiest Riding Physicians' Cart Ever Built.** only two wheeler to which a pole can be successfully used. Making it of greater ease and of lighter draught for animal to handle, than any two or four wheeled vehicle ever produced.

Send for Illustrated Catalogue and Price List. Correspondence Solicited.

OLEAN CART CO. LIMITED, OLEAN, N. Y., U. S. A.



The Times and Register.

Vol. XXII, No. 6.

NEW YORK AND PHILADELPHIA, FEBRUARY 7, 1891.

Whole No. 648.

ORIGINAL ARTICLES.	PAGE		PAGE		PAGE
REPORT OF SIXTY CASES OF UTERINE MYOMATA. By J. H. Kellogg, M.D., Battle Creek, Mich.	107	Compound Comminuted Fracture of the Leg	119	The Breathing Movements in Relation to Voice Production. <i>Makuen</i>	123
THE WEST INDIES AS A SANITARIUM. By William F. Hutchinson, M.D.	111	Sore Throat	119	Transactions of the American Gynecological Society for the Year 1890	123
SOCIETY NOTES.				THE MEDICAL DIGEST.	
NEW YORK ACADEMY OF MEDICINE	114	Erysipelas	119	The Parasitic Origin of Cancer. <i>Warren</i>	120
The Non-operative Treatment of Delayed Union in Fracture of the Leg. <i>Ridlon</i>	114	Basilar Meningitis	119	Notes from "Hospital Gazette"	123
Uniform Nomenclature in Orthopedic Surgery. <i>Townsend</i>	116	Amenorrhoea. <i>Parvin</i>	119	Hypersecretion of Milk	123
Tuberculous Joint Disease Treated with Koch's Lymph. <i>Shaffer</i>	117	Eczema Squamosum. <i>Stelwagon</i>	119	Tape Worm. <i>Campi</i>	123
MEDICAL SOCIETY OF BERKS COUNTY	117	Rpithelioma. <i>Stelwagon</i>	119	Treatment of Gall Stones. <i>Lekarchie</i>	123
A Case of Post Mortem, at the Reading Hospital	117	Psoriasis. <i>Stelwagon</i>	119	Hemorrhoids. <i>Shuford</i>	123
THE POLYCLINIC.				Psoriasis. <i>Hutchinson</i>	123
JEFFERSON MEDICAL COLLEGE:		Cystitis. <i>Brinton</i>	119	For Headaches. <i>Hurd</i>	123
Epilepsy	118	Injury on the Head. <i>Rex</i>	119	Dysmenorrhoea	123
Chills and Fever	118	Aphonia. <i>Solis-Cohen</i>	119	Epilepsy Following a Depressed Fracture Produced by Forceps at Birth. <i>Lane</i>	123
Emphysema Complicated with Bronchitis	118	MEDICO-CHIRURGICAL HOSPITAL:			
Pleuritic Effusion	118	Infantile Eczema. <i>Shoemaker</i>	119	The Phonograph in Testing Hearing. <i>Fiske</i>	123
Tertiary Syphilis	118	Pustular Eczema. <i>Shoemaker</i>	120	Treatment of Cancer. <i>Dunn</i>	123
Chlorosis	118	Asthma. <i>Anders</i>	120	Operating on Tubercular Peritonitis. <i>Ross</i>	124
Lead Poisoning	118	A New Drug. <i>Woodbury</i>	120	Some Causes of Death in Diphtheria. <i>Symson</i>	124
Pleurisy	118	EDITORIALS.			
Atheroma of the Vessels with Overacting Heart	118	POISONING IN DYEING ESTABLISHMENTS	121	The General Practitioner's Treatment of Chronic Atrophic Rhinitis. <i>Loeb</i>	124
Catarrhal Pneumonia	118	ANNOTATIONS.			
Hypertrophy of the Heart	119	Dr. Billings' Retirement	122	Suppurative Tonsillitis. <i>Rice</i>	124
		Michigan as a Health Resort	122	Immense Ovarian Cysts. <i>Castle</i>	125
		LETTERS TO THE EDITOR.			
		Motor Paresis Following Ether Injections. <i>Styles</i>	122	MEDICAL NEWS AND MISCELLANY, 125	
		A Case for Diagnosis. <i>O. F. H.</i>	122	ARMY, NAVY, AND MARINE HOSPITAL SERVICE 126	
		BOOK NOTICES.			
		Text-book of Hygiene. <i>Rohé</i>	122	NOTES AND ITEMS iv, xii	
		Mechanical Obstruction in Diseases of the Uterus. <i>Hulbert</i>	123		

Original Articles.

REPORT OF SIXTY CASES OF UTERINE MYOMATA,

TREATED BY ELECTROLYSIS, WITH DESCRIPTION OF NEW FORMS OF ELECTRODES AND A COULOMBMETER.¹

By J. H. KELLOGG, M.D.,
BATTLE CREEK, MICH.

As a student and assistant of the late Dr. Geo. M. Beard, of New York, some sixteen years ago, I became interested in the medical use of electricity, and for the last fifteen years have employed it extensively in the treatment of various classes of invalids in the sanitarium under my charge, in which not less than fifteen thousand patients have been treated by this agent, in connection with other therapeutic means. For nearly fifteen years I have made daily use of this agent in gynecological practice in its various forms. I had for several years noted the benefit of the galvanic current used in the treatment of cases of uterine myomata, before becoming acquainted with the improved method of application perfected by Dr. Apostoli, of Paris, and termed by him electrolysis. In the spring of 1887 I became acquainted with Dr. Apostoli's methods, and have since that time made very extensive use of it, with various modifications of my own. In the fall of 1887,

I obtained personal instruction from Dr. Apostoli, and afterwards, by his kind invitation, visited him at his clinic in Paris, where I had the opportunity of not only becoming familiar with the technique of his methods of operation, but also of witnessing the excellent results obtained by him. I was particularly struck, as every one familiar with Dr. Apostoli and his work must have been, with his patient and painstaking method of prosecuting his work, and with the infinite care with which morbid conditions were observed and recorded.

The purpose of this paper is to record the results of my personal work in the treatment of uterine myomata by electrolysis, to call attention to some practical points in the management of cases under treatment, and to discuss briefly the relative merits of this method and the surgical method by which the appendages of the uterus are removed for the purpose of artificially inducing the menopause.

As before intimated, the method employed has been essentially that of Apostoli, in which one large electrode is placed over the tumor, and made to cover a considerable portion of the abdomen, while the other electrode, properly constructed for the purpose, is introduced into the uterine cavity. I have employed the method of electro-puncture in only one case. The pelvic inflammation which followed the application, in spite of careful antiseptic applications, has led me to avoid this method, since I learned from Dr. Apostoli, when I visited him, that he employs the method of electro-puncture much less frequently than formerly. I consider the method accompanied by much greater hazard than the intra-uterine method, and rarely indicated.

¹Prepared for the Mississippi Valley Medical Association at the Louisville meeting.

The general construction of the intra-uterine electrode, which I have had constructed, is shown by the accompanying cut (Fig. 1). It consists of a flexible whalebone or hard rubber stem, attached to a metallic staff, and covered with fine copper wire, which is insulated from the staff to within three inches of the inner end, the remaining portion wound with platinum wire, and tipped with hard rubber. The sleeve of hard rubber assists in the control of the instrument in introducing it into the uterus. It also serves as a means of insulating the staff of the electrode.

I find this form of electrode more convenient and durable than any other which I have used. In cases where the cervical canal is large enough to admit the graphite electrodes of Dr. Apostoli, I frequently employ these with advantage. I have thought it wise, however, to modify the latter form of electrode by the addition of a hard rubber tip, which precluded the danger of perforating the uterine wall, which, as is well known, often becomes very thin in places, through the stretching due to the progressive development of a myomatous growth.

In company with other workers in this field, I, from the first, have felt the necessity of some more satisfactory form of abdominal electrode. The clay electrode of Apostoli, while fulfilling its purpose admirably in most particulars, is nearly always complained of by patients on account of its weight, and the liability of soiling the clothing, to say nothing of the almost certain wetting of the clothing of the patient if the electrode is made sufficiently moist to secure a good contact with the skin. After trying all the various forms of electrodes, including the vellum-covered, water-chamber electrode of McIntosh, I, for some months, returned to the use of the clay electrode; but, still appreciating its disadvantages, I continued experimenting with various substances until I finally hit upon the idea of combining powdered graphite, or gas carbon, with gelatine. A number of experiments, kindly carried out for me by one of my assistants, Dr. Hoenes, proved this combination to be capable of fulfilling all the requirements of a perfect abdominal electrode. It is light, clean, adhesive, a good conductor of electricity, and durable. I have often had an electrode of this sort in daily use in my office for weeks without being able to detect any material deterioration in it. I find that a greater quantity of electricity can be communicated to the patient through an electrode of this composition than through a clay electrode of the same size. I attribute this to the more perfect contact between the skin and the gelatine-graphite electrode than is obtainable with a clay electrode. The gelatine-graphite electrode is made as follows: Dissolve 20 ounces of best gelatine in 10 ounces of boiling water; add 10 ounces of glycerine and 2 drachms of sodium chloride; beat well, and add 10 ounces of finely-pulverized gas carbon, and mix thoroughly.

To form the above mixture into an electrode, take a shallow tin pan of the size desired for the electrode. Oil the outside of the pan with vaseline. Pour in a sufficient amount of the hot mixture to cover the bottom of the pan; lay in the pan a piece of sheet lint, cut of sufficient size to allow the edges to turn

up about one half inch around the sides of the pan; pour in some more of the mixture, sufficient to saturate and cover the lint; lay in another piece of lint, the same size of the first, and cover this also with the mixture in the same way. A third and fourth sheet of lint may be added, if necessary. Usually, two pieces are sufficient to give the desired strength. A piece of brass wire cloth, to one corner of which a binding post has been attached, is next laid in; add more of the mixture, if necessary, and then another piece of lint. The wire cloth and last layer of lint may be a trifle smaller than the electrode is desired to be. Lastly, fold the upturned edges of the first layer of lint over the back of the electrode, and apply a sufficient amount of the mixture to bind them in place. When the electrode is cold, and sufficiently hardened, carefully remove from the mold. If it adheres to the mold, pour a little hot water over the bottom of the mold. If the surface of the mold is not perfectly smooth, it may be polished with a spatula. Whenever the surface of the electrode becomes roughened by use, it may be smoothed in the same way. If the electrode becomes cracked, or its surface worn seriously, it may easily be repaired by adding a little of the hot gelatine mixture, and smoothing with a spatula.

I have used this gelatine-graphite electrode for more than six months, and am so well pleased with it that I have not had occasion to resort to the clay electrode in a single instance. I find it more useful in making applications to any part of the body in which a strong current is desired. I have found it especially serviceable in applying strong currents to the central nervous system.

I usually employ a current of from 50 to 250 milliamperes. For the last two years, through the suggestion of Dr. W. H. Riley, I have employed a coulombmeter for determining quantitatively the electrical dosage employed. It is perhaps unnecessary to explain that a coulomb is the standard unit of measure of electrical work.



FIG. 2.—A new form of coulombmeter

in the accompanying cut (Fig. 2), which was constructed by myself and an ordinary machinist working under my instruction, determines the amount of electrical work done by measurement of the oxygen and hydrogen produced in the decomposition of water. This instrument consists, first, of two tubes,—one inside the other, supported by a standard. The inner tube is extended a short distance above the outer tube, and is about one-half the diameter of the outer tube. Both tubes are closed at the lower end. Two platinum wires, uncovered and supported at a short distance apart, enter the inner tube at the lower end. When the tubes are filled with a 1 per cent. solution of sulphuric acid and water, and the platinum wires are connected with the positive and negative poles of the battery, electrochemical action occurs. Bubbles of oxygen rise in the liquid from the platinum wire, which represents the negative pole. By closing the upper end of the inner tube, the combined gas accumulates at the upper part of the tube; and as the inner tube is made to communicate with the larger tube, near its lower extremity, by a small opening in each side, the fluid contained in the inner tube is passed out into the larger tube as the gas accumulates in the upper part. By placing along side the instrument a graduated scale, the

FIG. 1.—A New Intra-Uterine Electrode.

inner tube may be divided into portions of such size as will contain just the quantity of the combined gases produced by a current of one ampere acting for one second. This amount of work is called a coulomb. By subdivision, any desired fraction of a coulomb may be indicated on the scale. When the fluid has all been displaced from the inner tube by the accumulated gas, the instrument is easily adjusted for use again, by simply withdrawing the rubber cork at the upper end of the inner tube. The weight of the water in the outer tube quickly forces the fluid into the inner tube, and when the fluid in the two tubes comes to the same level, the instrument is again ready for use. The instrument I have in use registers 120 coulombs, which represents as much electrical work as any one is likely to do at any one time.

Placing the coulombmeter in the circuit with the milliamperimeter and the patient, one can readily measure not only the strength of the current determined by the milliamperimeter, but also the actual amount of the electrolytic work done during the séance, by the reading of the coulombmeter. I have found the proper dosage as regards the number of coulombs employed, to be from 30 to 120 coulombs. In administering the treatment I take no account of the time of the séance, but only of the reading of the milliamperimeter and the coulombmeter, giving the patient, as a rule, as much current as can be endured without excessive pain, and continuing the application a sufficient length of time to produce the number of coulombs which I judge to be the proper dose for the case in hand. I do not wish to be understood as intimating that a given number of coulombs represents a given amount of work accomplished in the tissues, irrespective of the strength of the current, as one might suppose would be the case. I have made a number of experiments on animal tissues of various sorts, both alive and dead, and find that while there is a definite relation between the number of coulombs developed during the séance and the amount of work done in the tissues, the latter is also influenced very naturally by the strength of the current employed. Nothing could be more erroneous than the supposition that the same result will be produced by a current of 50 milliamperes applied for ten minutes, as by a current of 100 milliamperes applied for five minutes. This proposition is true as regards the number of coulombs produced in the coulombmeter, but the vital resistance of the tissues is a factor which materially influences the result when the current is applied to the human body. That a definite relation exists, I am satisfied, however, and I am still prosecuting experiments to determine just what it is, the results of which I hope to be able to publish in the near future.

The after-treatment of cases to which electrolysis has been applied, is a matter of no small consequence, but one which seems to have received little consideration. I have known a number of gynecologists who allowed their patients to travel several miles in a cab, or street car, or on the railroad after an application of electrolysis, irrespective of the weather or the season of year. My custom is to require patients who have received an application of electrolysis to assume at once a horizontal position, and to retain it at least a greater portion of the time for the next twenty-four hours. A hot vaginal douche of boiled water, or water containing one part of mercuric chloride to six thousand of water, is employed immediately after the treatment, and twice each day for a few days following. In case there is a tendency to hemorrhage after the treatment, a mixture consisting of equal parts of

alum, iodoform, and subcarbonate of bismuth is applied to the cervix, and held in place by a few pledgets of cotton or wool. By the employment of careful precautions against hemorrhage, the occurrence of this disagreeable symptom, which not infrequently attends the beginning of a course of treatment by electrolysis, may be prevented. I have thus been enabled to treat with success cases which had been declared by other gynecologists to be unsuited to this treatment, after they have been unsuccessful for months.

In cases in which blood follows the introduction of the sound, I find it advantageous to begin treatment by a thorough curetting of the uterine cavity, and sometimes thus remove at the outset a handful of vascular vegetations, the destruction of which by electrolysis alone would have required several weeks of thorough treatment. I am certain that a great saving of time can often be made by this means, and it seems to me that one should not be deterred from its employment by a desire to determine with the greatest possible exactness the therapeutic value of electrolysis. The patient's interest must be considered first. The interest of scientific investigation must not stand in the way of the employment of any measure that will expedite the patient's recovery.

For more than a year and a half I have had in use another instrument which consists of a double canula intended to be applied to the cavity of the uterus. The uterine end of the instrument consists of a metallic chamber, the inner canula reaching only slightly past its center. The rest of the instrument is insulated with hard rubber. By means of a fountain syringe and suitable connections of rubber tubing, the metallic chamber may be heated to any desired temperature, from near the freezing point to 200° F. by a current of water passed through it.

I find that a temperature of 140° to 180° F. is powerfully styptic in character, coagulating albumen and desiccating the tissues in such a manner as to effectually close bleeding veins and arteries. It is also an excellent means for destroying vegetations. I have found this instrument a most excellent means of checking a troublesome menorrhagia. Its application is certainly less troublesome and painful than that of the galvanic current, and I am not yet certain that it is not more effectual in combating hemorrhage. It is also useful in cases of uterine catarrh, subinvolution, and other conditions in which stimulation of the uterine tissue is required. It may be used for the application of either heat or cold, or alternations of heat and cold.

Great assistance may be gained in the treatment of myomata of the uterus by electrolysis, by the simultaneous employment of massage, baths, a regular dietary, and other means calculated to improve the general health.

The following is a brief description of each of the sixty cases of uterine myomata included in this report:

CASE I.—Miss C., of Michigan; aged thirty years; single; menstrual periods, too frequent; flow very profuse. Depth of uterus, four inches. Examination showed presence of an interstitial fibroid. Began treatment May, 1887, and continued for several months, making forty applications, employing 100 to 175 milliamperes. Result: the abnormal flow was checked, the tumor ceased to grow, and the patient has remained in excellent health since.

CASE II.—Mrs. P., of Georgia; aged thirty years; married; never pregnant. Menstrual flow profuse and very painful. Uterus, about three times its natural size, evidently from an interstitial fibroid. The

patient received but two or three applications, as she remained under observation only a short time. No results recorded.

CASE III.—Mrs. C., of Michigan; aged fifty years; widow; three children. Patient had had profuse flow for a number of years. On examination, found a large uterine myoma, apparently interstitial in character. Patient was very anæmic from constant hemorrhage. Applied 250 to 300 milliamperes weekly. After the fourth treatment, the patient was suddenly seized with symptoms of phlebitis. Severe pain in the tumor, extending into the right limb, which became enormously swollen. Temperature remained at 103° to 105° for several days. The patient was so ill that her attending physician almost despaired of her life. She recovered, however, in a few weeks, and found herself in much better health than before. At the end of two months, the tumor was reduced at least one-half in size, and the flow had ceased entirely. The patient's health improved for several months, when there was a temporary return of the hemorrhage. At the present time she is enjoying very excellent health.

I think the extensive phlebitis in this case was due to too strong a current, as the most thorough antiseptic precautions were taken, as in all my cases. At the time, I employed an instrument which was manufactured in this country, and was not accurately calibrated. The instrument indicated one hundred milliamperes. The patient bore this current without discomfort, as will be testified by my friend Dr. G. Betton Massey, of Philadelphia, who was present on one occasion when the treatment was applied. Comparison of the milliamperimeter with an instrument which I subsequently imported, indicated that the actual current employed was about three hundred milliamperes. The notable improvement in this case immediately subsequent to the phlebitis, was doubtless due to the plugging up of many of the nutrient vessels of the tumors. I have often observed a slight rise of temperature and an accompanying increase of pain and tenderness, and some increase in size of the uterus following applications of the current.

CASE IV.—Mrs. O., of Michigan; aged forty-six years; married; several children. Menstrual period, prolonged; flow very profuse; much pelvic pain. Found interstitial and subperitoneal myoma reaching half way to the umbilicus. Patient remaining under treatment five and one-half months, in which time thirteen applications were made. A current of 100 to 150 milliamperes was employed. The excessive flow was stopped, the pelvic pain relieved, and the tumor ceased to grow. The patient is still in good health.

CASE V.—Mrs. S.; aged thirty-five years; married; one child seven years before. Flow excessive for several years. Extremely anæmic. Had been aware of the presence of a uterine fibroid for more than three years. Had been under the treatment of leading gynecologists in New York and Chicago, and had spent a year in a sanitarium in the east, yet continually grew worse. Suffered constantly from a severe headache and distressing exhaustion. On examination, found uterine myoma, evidently an interstitial and subperitoneal growth. The tumor had been growing very rapidly for six months. I saw the patient first in 1887. After employing other measures for several weeks, began the use of electrolysis, using from 150 to 300 milliamperes. The patient bore the current well, but suffered much afterwards. The flow was somewhat decreased, but the tumor continued to grow in spite of treatment. The patient remained under treatment several months, during which time

forty applications were made. The tumor continued to grow till it had reached two inches above the umbilicus, and the patient had become so weak that she was scarcely able to move about. Despairing of relief by other means, I recommended an operation. The appendages were removed by Dr. Lawson Tait. The patient made satisfactory recovery from the operation, and inside of two months the tumor had reduced to half its former volume. The menopause was induced by the operation, and the patient has since made uninterrupted improvement in health.

CASE VI.—Mrs. S., of Illinois; aged forty-four years; widow; no children. Noticed excessive flow for several years. Palliative treatment has proved ineffectual, the patient continuing to grow worse. Suffered much pelvic pain; a complete invalid for several months. Examination revealed an interstitial fibroid of such size that the tumor reached about half way to the umbilicus. This patient did not bear the current very well. Was not able to employ over 60 milliamperes of current, and was never able to make more than two or three applications a month. The patient was somewhat irregular in coming for treatment; nevertheless, after a few months, very perceptible improvement was manifest. The flow was considerably diminished from the beginning, and after six months' treatment the tumor had manifestly diminished in size. The patient is at the present time enjoying excellent health. Has had no treatment for nearly two years. The tumor gives her no inconvenience.

CASE VII.—Miss K., of Ohio; aged, thirty-five years; single. Profuse flow, much pain; subperitoneal and interstitial tumor reaching half way to the umbilicus; evidently a great amount of pelvic inflammation. Patient did not bear treatment well. Was never able to employ more than 40 milliamperes of current, and always suffered much pain afterwards. A week or two after each treatment, the patient seemed better; the tumor seemed to diminish in size somewhat, and I felt encouraged to continue the treatment. The patient became discouraged and returned home, and, as I learned subsequently, died some weeks later from an acute attack of pelvic inflammation. She had been subject to attacks of this kind before she came under my care. The inflammation seemed to be aggravated by the treatment, although it was employed as carefully as possible. I have no doubt the patient was suffering from chronic salpingitis, in connection with the uterine myoma.

CASE VIII.—Mrs. B., of Indiana; aged forty-eight years; married; four pregnancies. Profuse menorrhagia for a number of years. Menstrual periods too frequent and prolonged. On examination, found the uterus double normal size, in consequence of the presence of an interstitial fibroid. Made seven applications of electrolysis, employing 100 to 125 milliamperes. Result: the abnormal flow was checked, the menstrual period became regular, and the patient was restored to good health. A year later the menopause was established, and the patient is now unconscious of the presence of any abnormal pelvic condition.

CASE IX.—Mrs. M., of Wisconsin; aged thirty-four years; married; never pregnant. Suffered for several years with a rather profuse menstrual flow, and pelvic pain. On examination, found a large multinodular, subperitoneal myoma, reaching nearly to the umbilicus. Made twenty-nine applications of electrolysis, 100 to 175 milliamperes, 75 to 100 coulombs. The local symptoms and the patient's general condition were improved, but no appreciable change was made in the size of the tumor.

[To be continued.]

THE WEST INDIES AS A SANITARIUM.

BY WILLIAM F. HUTCHINSON, M.D.

CHAPTER XI.

JAMAICA.

NEXT to Barbados, three days nearer sail to the United States, and surpassing every other island of the West Indies in access and variety of temperature, Jamaica comes next in our list.

Perhaps there are more ties between this beautiful island of the Caribbean and the United States than exist between us and any other.

Americans settled in Jamaica many years ago, and have built up prosperous mercantile houses, planted great fruit orchards, organized various lines of steamers, built fine hotels, and, finally have succeeded in obtaining control of all the railways in the land.

These various enterprises have brought the island into such close and intimate connection with America, that the number of people who are familiar with our institutions is many times greater in this island than elsewhere.

It is a matter of considerable concern to the traveler to find that the State from which he comes is not confounded by the first acquaintance he makes with one a thousand miles north or south, and that his new friend does not place Boston on the west shore of the Mississippi River. It is also a comfort to find most excellent hotels, and a number of first class family boarding-houses, caring for strangers, at prices entirely within the reach of American people.

In value as a sanitarium Jamaica stands first of all in my opinion. It is true that in another chapter I have given high credit to Barbados, and do not mean in striving to do justice to our latest acquaintance, to retract a word said in praise of an older one; but for the invalid, or one who fancies that he is such, a greater range may be obtained in this beautiful island than anywhere else in the world, with the exception of Hawaii.

It is reached by several lines of steamers from New York, the best and most comfortable of which is the Atlas Line, and I can recommend my good ship "Adirondack" and her courteous and handsome captain, as affording the strictest, safest, and most comfortable transportation that there is. All her cabins are lighted by electricity. Her saloons are wide and airy, and every sleeping-room is upon the upper deck, all of which are comforts—which will be easily understood by any one who has traveled in the tropics.

For the health seeker, it is not sufficient that he should be acquainted with tables of ranges of humidity, when barometric pressure indicates a coming storm. It is very necessary that the physician sending him there should be acquainted in a general way with the climate and ordinary temperature of the place, but unless he has personally become acquainted with the locality and its advantages, he will do better to consult some intelligent lady who has visited the spot, and take her advice as to its more important peculiarities. I say an intelligent lady, for there are many things about a health resort of the utmost importance to invalids that a man would scarcely notice, or having noticed, would be likely to forget by the time he had returned home.

It is not the presence or absence of great things in the way of hotels and palace cars that make up the sum total of the advantage of one place over another to the exiled sick person. It is the numerous little

things, each one slight in itself, perhaps, but adding up rapidly what concerns doctor and patient alike. It is better to know what amusements can be found, and what society, than the highest temperature.

Are the hotels reasonable, economical and comfortable, or are they like the caravansaries of Florida, glittering palaces that need a king's income to live on? Can a tourist find in a chosen resort the privileges of church, libraries and reading-rooms, to which he has been accustomed, or must he forego these and depend entirely upon natural attractions? Even so trivial a matter as to whether he can have his clothing properly laundried, is of no small importance when thousands of miles from home, with a limited supply. All these little things make up a great part of the comforts of an invalid in a foreign land, and it is almost impossible to learn of their presence or absence except from one who has carefully considered them.

I need hardly say that one part of this work is to make the readers as familiar as possible not only with large and important things that he should know, but with little things as well.

I have already spoken of ways of getting to Jamaica from New York, and the traveler who has been visiting the Windward Islands, will find the steamers of the Royal Mail an easy way of getting there from this point; but that is all.

One cannot go via Cuba, for instance, nor as yet by Florida, although while these lines are being written I have heard from Mr. Plant that he contemplates extending his Havana line to Kingston, which will place Tampa and that port within forty-eight hours of each other, and totally avoid navigation of the North Atlantic during the stormy season. There are at present three hotels in Kingston—the Park Place, the New American hotel at Constant Spring, and the Myrtle Bank. The first and the last are in town, the one recently built some two miles out upon a knoll that partially overlooks the city and a bit of the bay. While there, my home was at the Park Place; that of several fellow voyagers at the Myrtle Bank; and two or three others stopped at the new house, recently opened by ———, at Constant Spring, being in process of construction when I left, and unless some different arrangements have been made for travelers to go backwards and forwards to town to the hotel than existed when I was there, I think I should still give preference to a residence in the city.

I drove out to the new location two or three times, and found that the cab fare was about a dollar each way, while the tramway running in that direction stopped a quarter of a mile short of the entrance to the hotel grounds, a matter of no slight consequence if one needed to go to town in the day-time. It is also likely that the regular \$2.00 rates of the hotel in town would be very much increased by an American landlord, with small probability of increase in comfort. Myrtle Bank has the most delightful location, with a beautiful park like garden extending directly back down to the water, where one may sit in the cool shade under the beautiful tropical plants and flowers, and enjoy the cool sea breeze through the hot hours of mid-day.

Cabs are plentiful and cheap, subject to a fixed tariff, from which drivers rarely depart. It is only when going beyond the city limits that a bargain need be made, as they then charge whatever they think best.

Mails to Kingston come from the United States several times a week, and there are regular telegraph lines, charging usual West India prices, in this case

\$1.25 a word to any point east of the Mississippi. It is my purpose to append to this work a table of boat, cab and railway fares in all the places written of, corrected to date, which, I trust, will protect tourists from extortion.

At this point, I quote a few figures which will speak more authoritatively of the climate of Jamaica than my small experience can do. They are taken from the hand-book of Jamaica, 1888-9, and are from the pen of Maxwell Hall, M.A., F.R.A.S. The readings of the barometer and thermometers are taken at 7 A.M. and 3 P.M., local mean time, and have been corrected to Kew standard; the dew point has been deduced from dry and wet bulbs by means of Glaisher's factors, and every care has been taken to insure accuracy.

KINGSTON, JAMAICA, MEAN RESULTS FOR 1887—ELEVATION SIXTY FEET—MEANS FOR MONTHS.

MONTHS.	TEMPERATURE.		DEW POINT.		HUMIDITY.		REMARKS.
	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	
January....	68.7°	82.4°	65.2°	70.5°	89	68	Fair, slight earthquake 9th
February....	68.6	81.9	64.2	67.6	77	63	Fine.
March.....	70.6	81.7	63.2	66.6	77	69	Fine.
April.....	75.7	81.2	67.8	71.0	77	70	Fair, with showers.
May.....	78.9	83.0	69.8	71.5	74	69	Fair, rainy season 15th.
June.....	79.3	84.0	70.3	72.1	74	68	Fair, with showers.
July.....	79.9	86.0	69.9	73.8	74	66	Fair, rain at end of month.
August....	77.6	84.0	71.1	74.2	81	74	Fair, afternoon showers.
September..	77.7	85.0	71.3	74.2	79	68	Cloudy, earthquake 23d.
October....	75.7	82.0	70.3	73.4	84	74	Rain first half, fair last.
November..	74.0	84.0	68.6	73.3	84	71	Fair, with northers.
December..	69.1	83.0	68.5	70.4	83	55	Fine.
Mean....	74.6	83.4	68.0	71.6	80	69	

Sloan's Natural History of Jamaica, says: "Generally speaking, the two great rainy seasons are in May and October." During the winter months of December, January and February, and March, which is worse than either of the others at home, the weather is continuously fine. I was on the island thirty days this winter and saw but one slight shower, which did not extend over a half mile of area, and lasted fifteen minutes.

It will be seen from the above table that the range of temperature for four months is barely five degrees, dew point and humidity about the same, and barometric pressure, which I have omitted, steady at 30 inches. This presents, I believe, as favorable a record as can be shown, and I leave the figures to speak for themselves.

The first consideration entering a physician's mind in thinking of any particular place as a climate cure is, what special diseases it is especially beneficial to, and what cases would be likely to lose ground if sent there. My own stay was too short to learn personally, and I answer in the words of my friend, Dr. J. C. Philipps, who has been a leading physician of the island for twenty-five or more years.

"Jamaica offers a great variety of climate, being in this respect unique among the West India islands. Invalids with dyspepsia and nervous diseases will scarcely improve in upland ranges, doing well in Kingston, while the entire island is extremely valuable in bronchial affections, pulmonary diseases, and all forms of rheumatism. There are valuable saline, sulphurous and chalybeate springs, which are among the most effective in the world. There is no necessity to watch winds, as the island is in about the middle of the trades, and has no strong gales in winter months. In the lowlands, temperature varies a few degrees from 80 as a maximum, but may be brought to any desired coolness by ascent of mountain sides.

One always knows when rains are coming, their advance guard being visible at a distance upon the mountains, giving time to seek shelter, and showers always follow regular courses, reaching certain points at certain times. There is a constant, unvarying high temperature, and yellow fever is almost a myth."

I learned also from Surgeon-General Morse, C.B., and Dr. Frank N. Saundes, Chief Medical Officer of the Public Hospital, that many wonderful cases of cure of advanced tuberculosis were on record, and that they consider the island climate particularly valuable in lung disease generally, and my own judgment, founded on my short observation, tends to confirm theirs.

As I have previously remarked, the beauty of Jamaica and its sanitary value largely consist in the fact that one may choose almost any temperature from torrid to mid-temperate. A short journey takes you to an elevation above the sea where it is sufficiently cool to sleep under blankets, and be absolutely comfortable and well-cared for in excellent private boarding-houses. Or, you may go to different places in the island, and select a comfortable hotel at exceedingly moderate prices, either by the sea or in the hill country. If the former, you will find that the sea breeze so tempers the heat that it is easily borne; if the latter, that you will be at all times pleasantly cool.

At Montego Bay, on the northern coast, easily accessible by land or sea, I found several Americans comfortably housed at a good hotel for seven dollars a week. The regular hotel price for bed and board is two guineas a week, about ten dollars.

At Mandeville is a beautiful village in the hills of Manchester parish, 2,200 feet above the sea, where there is one hotel, Brooks', and two lodging-houses, with neat rooms and excellent table. It is best to telegraph up a few days before going, either to the hotel, to Miss Roy, or to Mrs. Halliday, to have rooms ready, as the number that can be cared for is limited.

From Kingston to Porus one goes by rail seventy miles; fare, \$1.25; and, if a carriage has been previously engaged at Mandeville, two persons and a couple of trunks will be carried the rest of the way for \$2.50, over a splendid road, among delightful scenery of mountain and of glen. Once arrived, everyone is overpowered by an irresistible drowsiness, that quiets the nerves like a dose of somnal, and is continually hungry.

For a week or two, or for a season, the traveller may spend his time in a most delightful way at Mandeville, where grow famous mountain oranges, which I consider the finest in the world. He may stroll in flower gardens amongst unknown blossoms; may sketch or paint wide landscapes of tropical beauty; may visit the club-house, where tennis and cricket are favorite games; or he may sit upon his piazza after a good dinner and watch the coming of the glory of a tropical sunset far up among the hills. These are sufficient occupations for most people, plus getting well as rapidly as possible, and improvement comes with rapidity.

The valleys of the Blue Mountains are many and charming, and, if one is fortunate enough to have friends who are estate owners among them, he will be entertained in royal style, as I was at Mona, by my kind friend, Captain Forwood, and will have a chance to study home-life in Jamaica.

A pleasant excursion that may be made from Kingston, within the limit of two days, is the ascent of Blue Mountain Peak, some 7,500 feet above the sea. Roads

are sufficiently good to permit riding the entire distance, and there is a cabin at the summit where the night may be passed, and sunset and sunrise over a watched large part of the island and surrounding sea. It is necessary, however, to prepare for this excursion with food and candles enough to last, as there are no places to get either on the way. A pair of blankets should also be taken, as the nights are cool on the peak, where frost is not infrequent during the winter months.

Another excursion is around the island on the steamer Arden, sailing from Kingston three times a month, making about a dozen stops at different ports in the island, giving sufficient time to each place for a pleasant visit to the town. This trip is known to the natives of Jamaica as the most salubrious that can be taken within a short distance of home, and the boat is familiarly known as Dr. Arden. Round trip tickets, covering all expenses, are issued by the Atlas Company for \$25, and tourists will find in the stalwart captain a pleasant companion and guide to all points visited.

If, also, any one chooses to vary the trip, by disembarking from the steamer at any port visited, he is certain of being able to return home by land at very reasonable rates, over some of the finest roads and through some of the loveliest scenery that exists in the tropics. The price for two horses and a carriage, that will carry two people comfortably with all necessary baggage, is \$5 a day, placing expenses for food for animals and driver at about \$1 more. At this reasonable rate one may spend a couple of weeks or more in leisurely exploring the island, certain of meeting with each nightfall a comfortable place to stop, and abundant hospitality from estate owners near at hand. Main roads encircle the island at short distance from the sea, and are connected by frequent traversing avenues from north to south.

The regular price for cabs inside the city limits is twelve cents for one or two persons, and, as I remarked before, if a longer trip is contemplated, it would be better to make a bargain.

While in Kingston a most charming drive is to Spanish Town, through the beautiful drive known as Bog Walk. It is difficult to conceive of anything pleasanter or more beautiful than this deep ravine which a little river has carved through lofty mountains, and left on either side of its foaming path sufficient room for excellent roads to be built. At Spanish Town, which was the capital city of the discoverers who first visited all these islands and countries, there are traces, in curious old buildings, and a cathedral, of the occupancy of the first lords of the land. Besides these, there is a pretty park, surrounded by a number of handsome buildings that would be a credit to a much more prosperous nation, which were used by the Colonial Government up to 1871. At this time, by a marvelous piece of stupidity, the administration transferred the seat of government from this safe and healthy locality to the far less salubrious environs of Kingston, which lies within easy reach of attack from foreign forces. Spanish Town was originally named Saint Jago de le Vega, and contains, among other interesting relics, the Spanish church of the Red Cross of St. Peter, now the cathedral; two large cannon captured from the French by Lord Rodney, and the foundation of the Spanish White Cross church and convent.

Six miles to the southeast is Passage Fort, where the English conquerors landed, and near it the seaside village of Port Henderson, where Mr. Hotchkin has recently erected convenient homes for invalids

and others who care to use the waters of the wonderful spring at hand.

No money need be carried to Jamaica except our own. What is good in New York is good there, and better if taken further south. American gold is at par in Kingston, and at Colon \$5 sold for \$9 in silver. Then in Columbia I got 20 to 30 per cent. premium on that silver in the paper money of the country, which is at par in purchasing power in those countries. So it is easy to compute the relative cheapness of whatever is bought there.

Jamaica has, what is especially valuable in a sanitary point of view, its baths. There is no place in the world that combines the advantages of a climate like this with so many valuable spring and river baths as this charming island. Invalids with dyspepsia and nervous diseases will do better in Kingston than in the upland ranges; while the entire island is extremely valuable in bronchial affections, pulmonary disease, and all forms of rheumatism.

Let me quote here from a pamphlet written by my friend, Hon. J. C. Phillipps, M.D. He has been the leading physician of the island for twenty-five years. It is entitled: "The Mineral Springs of Jamaica." Referring to those only that are easily accessible, he calls attention to "the bath of St. Thomas, the Apostle; the Jamaica Spa, and the Milk River bath." To which I add the Rock Pool, at Port Henderson. Speaking of the first one, he says the water is "unusually light, sparkling when received into the glass, fermenting slightly with acids, turns silver black, and seems specially charged with volatile products. It restores the appetite and natural action of the bowels, invigorates circulation, cleanses the urinary passages, strengthens the nerves, and seldom fails to give one an easy sleep at night. Its continued use enlivens the spirits, and sometimes produces almost the effect of inebriation. These springs may be ranked as hot thermiac sodic calcic waters, having a temperature of 120° to 130° F."

Jamaica Spa lies among the mountains of Port Royal, at an elevation of about 3,500 feet above the sea level, and is only to be reached by saddle animals at a distance of three hours from Kingston. The springs have a temperature of 66°, with clear, colorless water that leaves a red deposit in the spring, and along the course of its discharge. They contain sulphates of iron, lime, magnesia, and alum, in considerable quantities, are strongly chalybeates, and astringent to taste, and only need development to make them very valuable.

Milk River baths belong to the Government. In their circulars the directors say that the institution will furnish visitors with everything but food, for forty cents a day; and the matron will supply the latter at one dollar per day. They are readily accessible by steamer direct, or by rail and comfortable carriage.

The water has a temperature of 92° F., containing sulphate of soda, chlorides of sodium, magnesium, potassium, and calcium, with traces of lithia, iodine, bromine and silica. It is especially valuable in chronic rheumatism and allied diseases, in paralysis and gout, in scrofula, and in uterine diseases, particularly tumors.

He says: "I remember that an old surveyor whose joints were bent and distorted with rheumatism, went away in a totally helpless state to this spring, and returned in two or three weeks riding gaily on horseback, ready to set about his arduous labor. I have seen people who had been weeks in bed with acute rheumatism, sent down in carriages, taken into the

bath in a chair, who have been able after three or four baths to walk up and down twenty or thirty steep stone steps with ease and comfort, and permanently cured. A well known physician was there suffering with gout, and after three days was able to go out and dine with a friend at a distance. The proper months to spend at Milk River are January, February, March, and April."

Port Henderson I visited and examined as a guest of the owner, Mr. Hodgkin. It is beautifully situated on the sea coast, opposite Port Royal, where pure salt air and beautiful seascapes are constant. There are excellent lodging-houses close to the bath, to be let furnished, but servants and food must be obtained outside. Fish are plentiful, and other eatables can be arranged for at moderate expense. The bath itself is of strong saline taste, temperature about 70° F., and is peculiarly soapy, as if strongly alkaline, but no analysis has been made so far. It is some twenty feet square, from two to five feet deep, with constant renewal by bubbling springs, having a discharge of about 200 gallons a minute. Its bed is excavated from solid rock, and it is housed in and properly cared for. I could obtain but few data as to its value, except that it possesses strong tonic properties, eliminating fatigue and restoring sexual tone. There can be no more charming place for those who love sea views and sea air, and are content to have no other amusement than what they themselves can furnish.

In conclusion, it is probable that Jamaica and the United States will soon be so closely joined by several new lines of steamers, that Americans will find it easier to go there than it is at present to reach Bermuda, while between this and other resorts of equal nearness, there can be no question as to Jamaica's superiority.

Society Notes.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON ORTHOPÆDIC SURGERY.

Stated Meeting December 19, 1890.

V. P. GIBNEY, M.D., Chairman.

THE NON-OPERATIVE TREATMENT OF DELAYED UNION IN FRACTURE OF THE LEG.

DR. JOHN RIDLON presented a paper upon this subject, illustrated by two cases.

The first patient, Thomas C. B., thirty years old; unmarried; gave no history of any constitutional disease. On March 22, 1888, while endeavoring to escape a passing team, he sustained a compound fracture of the right tibia in the lower third. The fracture was treated by a plaster of Paris dressing under the direction of a very well-known and skillful surgeon. The plaster splint was renewed from time to time, yet on September 17, when he was admitted to the Roosevelt Hospital, there was still slight motion at the seat of fracture, and Dr. Frank Hartley found on exposing the parts at the time of operation that there was an oblique fracture of the tibia, passing from below upward. The space between the fragments was filled with a thin wedge-shaped piece of fibrous tissue. At the inner edge of the fracture there was a thin line of bony union. The fragments were freshened, and then wired together, and the plaster dressing applied. He remained in bed for thirty-one days, but at the time of his leaving the hospital, on October 22, the union was not solid.

December 27. He was transferred to Dr. Ridlon's care.

January 10, 1889. The plaster was removed. There was distinct antero-posterior motion, and soft union, but no callus could be felt. There was some tenderness on motion and pressure at the point of fracture. Only moderate constriction was made, as the dependent position, after the removal of the plaster, caused abundant oedema. The patient was allowed to go out of doors at once. At the end of nine weeks union was solid, and there was abundant callus. The patient said then that he had continued the use of the crutches for sometime, but had removed the upper supporting part of the splint at the end of the third week, as it was uncomfortable. The lower portion of the splint, which acted only as a lateral support, he continued to wear for about five months.

The other patient, Wm. D., twenty-two years old, was admitted to the New York Hospital on May 26, 1890, with a compound comminuted fracture of the right leg at the middle and lower thirds. The bones projected anteriorly through a large lacerated wound; there was much displacement, and much contusion. Dr. W. T. Bull removed the loose fragments, and secured apposition and good drainage. A rise of temperature necessitated a change of dressing, and Volkmann's splint was applied for three weeks, and, after this, plaster of Paris splint with a fenestrum. Union was delayed. He was allowed to walk about on crutches and partly on the leg for two or three weeks prior to his discharge on August 5, for insubordination. At this time there was some deformity, and he was still wearing the plaster splint. When the patient came under Dr. Ridlon's care on September 22, no callus could be felt; but there must have been soft union, as the fragments could not be displaced. The splint was discontinued, and in its place the caliper splint of Thomas, of Liverpool, was applied, being so modified as to prevent motion at the ankle. A laced leather sleeve was also added. A band buckled across the front, just above the patella, prevents forward bending of the knee, and another band below the knee surrounds the leg and outer bar, and furnishes the means of obstructing the circulation to any desired extent. The leather sleeve adds to the patient's comfort; but care should be taken that it is not sufficiently tight to check the desired oedema. As a result of this treatment, solidification slowly but steadily took place, and an abundant callus was thrown out. At the end of nine weeks, no motion could be detected, and he could walk across the room without the splint or any support. After the application of the splint, the crutch was used for only a short time, and he was soon able to walk three or four miles without discomfort, and, after eight weeks, he returned to his laborious occupation of unloading vessels.

These cases served to illustrate the treatment advocated by the author in cases of delayed union, which he was careful to distinguish from non-union, or pseudo-arthritis. The normal union of a fractured bone occupied a pretty definite period, and when delayed beyond this time, it was properly a case for non-operative treatment; whereas, such treatment was entirely inapplicable to cases of non-union. For delayed union no cutting operation should be thought of until every other known means, and an abundance of time, have been expended.

The present fashion of treating fractures by plaster of Paris bandages led to deficient immobilization, or else to constriction at the seat of fracture. The author thought no dressing had ever been devised

for the treatment of fractures which so poorly accomplished the end in view; *i. e.*, immobilization without undue compression. Good results were obtained with these dressings; but their proper use required greater skill and experience than any other dressing. If plaster were applied before swelling occurred, it prevented the formation of the normal amount of callus, and in a certain number of cases, resulted in delayed union. If applied after the occurrence of swelling, the dressing soon ceased to immobilize the part, and so not infrequently caused delayed union.

The treatment advocated by Dr. Ridlon was that employed by Hugh Owen Thomas, and, in the words of that surgeon, consisted in "hammering, damming, depending, and fixing" the bones involved in the fracture.

The hammering may be done with or without an anæsthetic, and should not be repeated oftener than once in two weeks. Dr. Thomas at first made use of intermittent constriction, but in 1881 he employed continuous "damming," and resorted less to hammering. The constriction should be sufficient to cause abundant cedema, but not enough to cause pain, or interfere with the nutrition of the limb. The proper immobilization of the fracture is the most important element of treatment, and to do this the bones must be held without producing constriction at the seat of fracture, the muscles covering the part must be kept at rest by continuous fixed traction, and not nagged by elastic or intermittent traction, and the joints, which are moved by these muscles, must be absolutely locked. When there is a fracture of the bones of the leg, the knee and ankle must be locked, and it was on this account that he had modified the caliper splint of Thomas in the way already described. This objection applied with even greater force to the well-known splint of Dr. H. H. Smith, of Philadelphia.

Dr. N. M. SHAFFER said his experience with ununited fracture dated back to 1876, when he saw in consultation an ununited fracture at the junction of the upper with the middle third of the femur. The injury had been received about three months previous, and there was much overlapping. He applied pressure by means of a felt co-aptation splint, and a traction apparatus, which allowed of the patient walking about with crutches. After a few weeks he walked on the limb with the traction splint, and in about three months the parts were united. He had had since then three other cases of fracture of the shaft of the femur, which he had treated in the same manner, and with equally good results. He thought that the method advocated in the paper was not necessary, and that as much could be done by securing apposition of the fragments, direct pressure at the point of fracture by means of a co-aptation splint, and the maintenance of the good position by the use of some traction apparatus. Change of climate also exerted a strong influence.

Dr. A. B. JUDSON thought that cases of this kind, which had been treated by Dr. H. H. Smith, as well as some treated by the late Dr. E. D. Hudson, of this city, showed that the desired result could be obtained by the use of an apparatus which would permit the patient to walk around. Union was brought about under these circumstances probably by the friction, irritation, and congestion of the parts caused by the walking. Dr. Thomas' experience seemed to confirm this view, but the treatment by hammering he considered cruel. He was reminded of a suit for malpractice which was brought against Dr. Garcelon, of Maine, on account of an ununited fracture. In order

to excite sympathy in his behalf, the patient had applied a rough home-made apparatus, and had gone about the country in this way for sometime previous to the trial; but when the case came to trial, it was found that union had taken place.

Dr. S. KETCH spoke of a boy who had received a compound fracture of the femur, which by injudicious treatment had failed to unite. When he saw the case in consultation, the boy was suffering great pain, and partly with a view to relieving this he applied a long traction splint without any co-aptation splint. The pain was almost immediately relieved, and the local condition also improved, so that within a month he was walking about on a hip splint.

Dr. R. H. SAYRE related his experience with a case of delayed union in a fracture of the leg, occurring in a syphilitic subject, who was also in the early stages of locomotor ataxia. He was a very heavy man, and there was a marked angular deformity. After irritating the ends of the bones by rather severe manipulation with the hands, he applied plaster of Paris, and renewed it from time to time for six or eight months. During the first month he used crutches, but after this he was able to put the feet to the ground. At present, there is firm union of both bones. In this case there was much cedema without the use of a constricting band, for the patient's heart and kidneys were in a bad condition. Dr. Sayre thought that the hammering which the weight of the body produced upon the parts, after they have been placed in position, was more efficacious than a hammering of the sides of the fragments by means of a mallet. He thought it quite possible that too prolonged traction in cases of fracture of the femur might be responsible for some of these cases of non-union, for, it was not improbable that more traction was often exerted than was sufficient to overcome the already tired muscles, and as a result the bones were drawn too far apart to secure good union. He could not accept Dr. Ridlon's criticisms upon the use of plaster of Paris as a surgical dressing for fractures in general. If properly applied immediately after an injury, and after the parts were in proper position, they could be immobilized, and there would be very little swelling. The swelling was often due to obstruction of the circulation by the abnormal position of the bones.

Dr. W. R. TOWNSEND spoke of a case which he had presented to the Surgical Section last year. The boy had fractured his femur, at Seabright, and notwithstanding skillful surgical treatment, there was no union after three months. He was brought to the Hospital for Ruptured and Crippled in this city, and a long traction splint was applied, which enabled him to go about. Walking around, together with the change of air, brought about speedy improvement, and after eight weeks, there was good union, and the apparatus was removed.

Dr. C. A. POWERS said that a considerable number of cases of delayed union in fractured legs were yearly referred to him, at the Out-Patient Department of the New York Hospital, after their discharge from the wards. It was his invariable custom to have them walk about with a light plaster of Paris splint, and his results had been uniformly good. He had certainly treated, during the last year, six or eight cases, and in no instance had it been necessary for them to return to the In-Door Department on account of failure to secure good union. He was familiar with the history of Dr. Ridlon's second case, who was originally a patient in the New York Hospital. He believed that had this patient walked about without

the application of a brace, he would most probably have obtained good union in about the same length of time. The delayed union in this case was distinctly due to the severe nature of the compound fracture, this being followed by suppuration and some necrosis. He thought the means advised by Dr. Ridlon excellent, yet braces of this kind were not easily within the reach of many country practitioners, and more convenient means would accomplish the same results. He could not understand Dr. Ridlon's strictures upon the use of plaster of Paris, and he heartily endorsed what Dr. Sayre had said on this subject. If deprived of the use of plaster of Paris, he would feel that he had lost the most valuable means of all means at his command for treating fractures of the leg or arm. Out of five or six hundred cases of fracture of the upper extremity, which had been under his care, there had been very few cases of delayed union which had not yielded to rubbing of the ends of the bone, blistering, or very light hammering, the latter not sufficient to cause pain. In two or three obstinate cases, the ends of the bones had been brilled; the patients were treated as out-patients, and with invariably good results. He did not remember that he had ever been obliged to refer a patient to the hospital for operative treatment. He thought that similarly good results would follow this plan of treatment in most cases of delayed union in fractures of the leg.

DR. RIDLON, in closing the discussion, said that he thought the application of a snug plaster, or other bandage, lessened the amount of swelling, and that the less swelling, the less the callus, and *vice versa*. There was no question about the efficiency of plaster of Paris when skillfully applied, but it was not always so applied, and he had seen very unpleasant results from its use. As regards the effect upon these cases, of walking about, he would say that his first patient walked around his room, with a well adapted plaster splint, for two and a half months after the operation, without any gain in solidification; whereas, three days after beginning the treatment which he had described, the patient was able to walk some distance. The second patient had been walking around in the hospital with crutches, and after leaving there, continued to do so for about three months more before coming under his care. Under the new treatment, he was able to dispense with one crutch at once, and with the other very soon afterward, and at the end of eight weeks, returned to his work. These two cases were of course not sufficient basis for any definite conclusions, but they were presented for the purpose of illustrating a plan of treatment not very commonly known or employed here.

DR. ROYAL WHITMAN presented a case of fracture of the neck of the femur, in a child, aged seven years.

UNIFORM NOMENCLATURE IN ORTHOPEDIC SURGERY.

DR. W. R. TOWNSEND took this for the theme of his paper, which was as follows:

The object of writing this short paper is to elicit a discussion from the members of the Orthopedic Section of the Academy of Medicine upon a subject to which, of late, little attention seems to have been paid, yet to which much attention and time must be given, unless one is continually provided with a dictionary when reading; for, to read intelligently the medical literature of to-day, a study of etymology and synonyms is all-important, and even with this knowledge, we may still often be in doubt as to what disease is referred to, as some authors describe some-

what different affections under the same name. The Spondylitis of medicine is essentially different from the Spondylitis of surgery. The former is a rheumatoid peri-arthritis, affecting chiefly the spinous processes and lateral masses, the inflammation encroaching on the foramina of exit and producing various painful neuralgias; the latter is Pott's disease, or tubercular osteitis of the vertebræ, etc.

Many reasons exist for this confusion and multiplication of terms. Many diseases were so inaccurately described at first, that the name suggested could easily be improved upon, and later writers have done so, with a view of simplifying matters, and have thus increased our list of synonyms; again, popular terms or names that could be easily understood by the laity, have been introduced from time to time, until in some cases such terms have almost entirely superseded the more exact and scientific ones. Increased knowledge, such as the discovery of the tubercle bacillus, has caused us to classify some diseases as tubercular, just as we classify others as syphilitic, or malarial, and this list will probably be still further increased.

It is not my purpose to take any disease and weary you with a list of the different names it has gone by from the earliest times to date, but I will simply give several examples.

In a recent work on Orthopedic Surgery, the same morbid process or disease, when it effects the spine, is known as Pott's disease; when affecting the hip or sacro-iliac joints, as hip disease, or sacro-iliac disease; when affecting the knee, as tumor albus, and in the case of the other joints, simply as ankle joint or tarsal disease, etc. Of course, all, or nearly all the other terms in common use, are referred to, but it is under the above headings that the disease is described.

The hospital reports of the Roosevelt, New York, St. Luke's, Mt. Sinai, the Children's Hospital, Boston, the New York Orthopedic, and the Hospital for the Relief of the Ruptured and Crippled, show this same variety of expression. In them, we read of hip disease, hip joint disease, tuberculosis of the hip, tuberculosis of the hip joint, morbus cœxæ, chronic disease of the hip joint, and osteitis of the femur. In other words, in seven different reports, we have seven different names for the same disease. Other examples could easily be cited.

This multiplication of terms leads to confusion and much difficulty in actually arriving at a true idea of the relative frequency of any one disease, unless we thoroughly appreciate these facts; for, who can say that the disease was of the same nature, when on one page we read of tuberculosis, on the next of caries, and the next of osteitis of the tarsus.

Much of this variety and confusion of terms could easily be avoided.

This problem, although presenting difficulties, seems to me ought to be discussed. Its solution depends simply upon the profession agreeing upon certain terms to describe certain diseases, and then strictly adhering to them. More care in diagnosis will result; a synovitis or arthritis will not be classified as an osteitis, and all the different diseases of the knee, for instance, will not be included under the terms white swelling, or knee disease.

DR. KERCH offered his congratulations to the author for the novel and interesting subject upon which he had written. He thought, however, that it would be very difficult to find one name which would cover the various conditions of disease found at the hip joint. He agreed with the author of the paper that such terms as "tumor albus," and similar expressions, should be discarded.

DR. H. W. BERG thought pathology was at present too vague to admit of the use of a more exact nomenclature.

DR. R. H. SAYRE reminded the members that Dr. J. W. S. Gouley had devoted much time and labor in the preparation of an exhaustive work on medical nomenclature and classification of diseases. In it were mentioned terms which were very curious, although etymologically correct, and the profession would be slow to adopt such expressions. For instance, castration is spoken of as orchietomy.

DR. JUDSON was of the opinion that there was no likelihood of any one being led astray by the present nomenclature, and other authors besides Dr. Gouley had expended much labor upon similar works, which were of doubtful utility.

DR. TOWNSEND, in closing, said that his paper had been misunderstood, for no question of pathology was involved. He had simply deprecated the use of so many terms to express one and the same condition.

TUBERCULOUS JOINT DISEASE TREATED WITH KOCH'S LYMPH.

DR. N. M. SHAFFER presented, on behalf of Dr. T. Halsted Myers, a report of the following cases:

CASE I.—Girl, aged thirteen years. Hip joint disease had existed for three years, abscesses discharging more or less for two years and ten months. Moderate glandular enlargements existed all over the body.

December 15, 1890: Examination showed no deformity except shortening and muscular atrophy. The motion at the joint was very considerable, and no pain had been felt for months. Abscesses below the great trochanter discharged through six sinuses, several of them near together, surrounded by a dark purple areola, covering an area of about two by three inches. This patient received half a milligramme of the lymph at 3.30 P.M. No reaction was observed.

December 17: A second inoculation of half a milligramme was followed by a slight reaction, the temperature rising to 101° . No change was noticed in the condition of the joint. Two of the sinuses were closed, and the discharge from the other was unchanged.

December 19: The purple areola has disappeared, leaving only little red islands about each sinus. The skin had become dry and scaling, where it was previously necrotic.

CASE II.—Boy, aged six years. Had had hip disease twenty-six months; abscess discharging intermittently for four months.

December 15: Half a milligramme of the lymph was injected at 3.30 P.M. Examination at that time, showed the limb to be flexed at 155° , abducted 15° , rotated outward 30° . There was shortening and atrophy, and a sinus was about to open again. The limb was moderately sensitive, and there was less than ten degrees of flexion. Reaction came on in ten hours. Temperature at that time 101.4° ; night-cries began anew, and the joint became very painful. On the following morning this was very evident, and there was almost no motion in the joint. Flexion and abduction were also increased, and the inguinal and cervical glands seemed larger. With the fall in temperature, the pain and deformity also diminished markedly, but not entirely, and the original amount of motion was restored.

December 18: A second inoculation of half a milligramme was given, and again the temperature rose, and the joint became acutely sensitive and more deformed, and motion was practically nil. This was

the condition at noon. The site of the sinus was no longer purple, and was covered by dry, scaly skin.

DR. SHAFFER also presented a report of some of his cases which had been treated according to this method. (See *Medical News*, December 27, 1890.)

DR. R. H. SAYRE asked if much of the increase of pain noticed in one of the cases might not be due to the removal of the apparatus.

DR. SHAFFER replied that this patient had previously been in bed for days at a time, without the apparatus, and yet had not experienced any such pain as was present after the inoculation.

DR. BERG thought that some of the phenomena observed might be referable to the fever which was present, just as an increase in the joint symptoms was sometimes noticed during the progress of the acute exanthemata.

DR. SHAFFER said that he had seen cases of joint disease suffer no exacerbation during the course of a typhoid fever, in which the temperature frequently reached 105° , and scarlatina also often failed to affect the condition of a diseased joint. Measles, on the contrary, was particularly prone to increase the severity of the joint symptoms. Hence, there was something more than fever necessary to account for the influence of certain diseases on the condition of a joint; and in one of Dr. Myers' cases, there was no fever, and yet marked improvement followed the inoculation.

MEDICAL SOCIETY OF BERKS COUNTY.

THE Medical Society of Berks county met at the Board of Trade rooms, January 13. The following officers were elected:

President, Dr. W. Murray Weidman, of Reading; Vice-President, Dr. D. Webster Kupp, of Gibralter; Treasurer, Dr. A. S. Raudentush, of Reading; Recording Secretary, Dr. C. W. Bachman, of Reading; Corresponding Secretary, Dr. Israel Cleaver, of Reading; Censors, Drs. C. G. Loose, C. S. Ermontrout and F. W. Frankhauser, all of Reading; Curator, Dr. C. L. Kurtz.

Dr. Deaver, of the University of Pennsylvania, read a very interesting paper on Treatment of Injuries of the Brain.

In the evening the annual banquet of the Society was held at the Mineral Springs Hotel. Prof. W. Pepper, of the University of Pennsylvania; Theo. Parvin, of Jefferson Medical College; Drs. Deaver, of the University; Halberstadt, of Pottsville; Craig, of Columbia, President of the State Medical Society, were present to assist in making the banquet interesting and amusing. About thirty-eight covers were laid. All did justice to the banquet.

At the next meeting of the Society, in February, there will be a discussion of the treatment of tuberculosis, as given by Koch. As a number of the members are very much interested, there is likely to be a large attendance.

A CASE OF POST MORTEM, AT THE READING HOSPITAL.

J. M., aged seventy-six years, being admitted two days prior to death; as one of those unusual accidents of a soft catheter breaking in the urethra had happened, the operation of lythotomy was performed, but to no effect, as the patient died next day. The post mortem revealed the cavity of the bladder diminished, the walls at least one-half inch in thickness; walls pocketed and contained sixteen calculi, ranging in size from a hazle-nut to a large shell-bark; prostate enlarged; ureters dilated to the size of a large

finger; pelvices of both kidneys were filled with pus, showing that the man had been a sufferer of pyelonephritis, chronic cystitis, stone in the bladder, etc. No history could be obtained as to how long the man had been a sufferer.

The Nooten wing of the Reading Hospital is rapidly nearing completion, and adds beauty to the building, as well as being useful to suffering humanity.

The prevailing diseases at present are: Measles, in an epidemic form; chicken-pox; and a number of cases of diphtheria have been reported.

Dr. M. L. Bertollette, of St. Joseph's Hospital, has ordered some of Prof. Koch's lymph.

F. W. FRANKHAUSER.

The Polyclinic.

JEFFERSON MEDICAL COLLEGE.

Reported by J. E. TAYLOR, M.D.

IN a case of epilepsy, with the history of frequent attacks of convulsions, with total loss of consciousness: The patient attributed these attacks to an injury received from a fall that occurred six years ago. The convulsions were preceded by vertigo and tremor in the right arm and leg, afterward becoming general. The following treatment was advised:

The inhalation of the nitrite of amyl, to ward off an attack, and the following prescription, viz.:

R.—Potassii iodidi..... gr. x.
Potassii bromid..... " x.
Ammonii brom..... " x.
Tr. belladonnæ..... gtt. ij.
Syr. zingiberis..... f3j.

M.—Sig. Ter die.

A man, aged forty years, presented himself at the clinic. He had previously had chills and fever. He presented these symptoms: Four months ago began to have severe pain in the abdomen; one month ago the attacks began to be more severe in character, followed by diarrhœa, swelling of the abdomen, and shortness of breath; slight pre-tibial œdema; tongue was large, heavily coated, pale and flabby, showing the marks of the teeth; liver somewhat hardened and enlarged; at times very considerable tenderness over the abdomen, with occasional bloody fecal evacuations. The following treatment was advised: Keep the bowels in check with

R.—Bismuth subnit..... gr. x.
Acid. carbolic..... gtt. ss.
M.—S. Every two hours.

R.—Cocainæ..... ʒj.
Ung. belladonnæ..... f3j.
M.—S. Apply over the abdomen.

Opium, in suppository. The diet to consist of milk, cornstarch, etc. No meat.

The following treatment was ordered in a case of emphysema complicated with bronchitis:

R.—Ammonii iodidi..... gr. x.
Ammonii chloridi..... gr. x.
Syr. tolu.,
Mucil. acaciæ..... āā f3j.

M.—S. Three times a day.

In a case of pleuritic effusion in a man, aged twenty-five years; no history of malaria or rheumatism, but had had an attack of pleurisy two weeks prior to admission, the pleurisy was on the left side. Patient complained of pain on the left side, of a week's duration, followed by marked shortness of breath; bulg-

ing of the left nipple was observed; there was absolute dullness on percussion, from the second rib down, with tympanitic resonance at the upper part of the left lung, both anteriorly and posteriorly, absent fremitus. Cardiac dullness an inch or more to the right of the sternum, showing marked displacement of the heart; the temperature was normal. The following treatment was prescribed:

R.—Potassii acetatis..... ʒj.
Tr. ferri chloridi..... gtt. x.
Acid. acetici dilu.,
Syr. limonis..... āā f3j.

M.—S. In water every four hours.

The following was given in a case of tertiary syphilis:

R.—Hydrargyri chlor. corrosiv. gr. ʒi.
Potassii iodidi..... gr. v.
Syr. sarsaparillæ..... f3j.

M.—S. ter die.

A case of chlorosis was presented at a recent clinic. The patient, a girl, sixteen years of age, had these symptoms: Very anæmic; severe frontal headache; poor appetite; constipation; pale tongue; palpitation; shortness of breath; a murmur was perceived at the left base of the heart, also heard in the carotids. The following treatment was prescribed:

R.—Aloin..... gr. ʒi.
Ext. hyoscyami..... gr. j.
Rhei..... gr. ij.
Olei terebinth..... gtt. j.

M.—Ft. in pil.

R.—Acid. phosphor. dilu..... f3j.
Tr. gentian. comp..... f3ss.
Elix. simplicis..... f3ss.

M.—S. A teaspoonful before meals.

In a case of lead poisoning, the following treatment was administered:

R.—Potassii iodidi..... gr. x.
S. Three times daily.

R.—Magnesii sulphat..... f3j.
Acid. sulphuric. dilu..... gtt. ij.
Syr. zingiberis,
Aquæ dest. āā ad f3ss.

M.—S. Every hour.

This treatment was followed by most marked improvement.

The following prescription was given in a case of pleurisy:

R.—Potassii acetatis..... gr. xv.
Morphinæ acetat..... gr. ʒi.

M.—S. Take every three hours.

A man, aged fifty-five years, was brought before the class presenting these symptoms: Shortness of breath on exertion; complains of defective vision in the right eye. On making an eye examination, it was found that there had been retinal hemorrhage. The heart was overacting; vessels prominent; the urine was normal. A diagnosis was made of atheroma of the vessels with overacting heart. The following treatment was advised: Laxatives, vegetable diet, the patient instructed to do nothing that would likely over-exert him.

R.—Tr. aconiti..... gtt. iij.
S. At night.

R.—Ac. phosphor. dilu..... gtt. xx.
S. Three times a day.

A case of catarrhal pneumonia was presented at the clinic with these symptoms: Frequent pulse and

respiration; high temperature; slight cough; a few days prior to admission the patient had a chill; dullness was noted over the whole anterior and posterior parts of the right lung; coarse, moist rales; harsh respiration; bronchial breathing near the angle of the right scapula; there was diarrhoea; heavily coated tongue, red at the tip; no eruption; abdomen not tender. The following treatment was given:

R.—Ammonii chloridi..... gr. x.
Potassii acetatis..... gr. x.
Tr. digitalis..... ℥ v.
Aque dest..... f 3j.

M.—S. Every four hours.

In a case of marked hypertrophy of the heart, in which the patient had attacks of shortness of breath, was ordered the following:

R.—Barii chlor..... gr. ʒss.
Ext. belladonnæ..... gr. ʒss.

M.—S. Three times a day.

Sp. ammon. aromat. for the attacks of shortness of breath.

In a case of compound comminuted fracture of the leg, in which there was great laceration and destruction of tissue, complicating the important vessels and nerves of the part, an amputation was performed at the upper third of the leg.

The following was recommended as an excellent application in a case of simple "sore throat":

R.—Zinci sulphat..... gr. ijss.
Aque rosæ..... f 3j.

M.—S. Use as a spray, three times daily.

A man, aged forty years, was presented at the clinic with erysipelas; the trouble had existed for three days. He was treated as follows: Hydrochlorate of pilocarpine, gr. ʒ, was given hypodermically, followed in four hours by R.—Ext. jaborandi fl., gtt. xx, every four hours, with tonic doses of quinine.

In a case of basilar meningitis, occurring in a boy, sixteen years of age, presenting these symptoms: Complaints of sore throat, the tonsils were swollen, and the throat inflamed; head drawn back; tenderness at the back of the neck, with rigidity of the muscles to the extent of opisthotonos; pupils slightly dilated, and react to light; reflexes were preserved; some fever; no vomiting; no eruption; the patient had been placed on bromide of potassium, grs. xx, which was reduced to gr. x every third hour, with a very marked beneficial result.

Prof. Parvin gave the following treatment in a case of amenorrhoea, complicated with malaria, viz.:

R.—Tr. ferri chloridi..... ℥ xv.
Quinin. sulph..... gr. v.
Tr. capsici..... ℥ x.
Zinci sulphat..... gr. ij.

M.—S. Every four hours.

Dr. Stelwagon prescribed the following in a case of eczema squamosum:

R.—Acid. boracici..... gr. xv.
Glycerini,
Alcohol..... āā ℥ v.
Thymol..... gr. ʒ.

M.—Ft. lotio.

Sig. To be rubbed on.

Dr. Stelwagon, in a case of epithelioma, treated it in the following manner: By first curetting the surface of the ulcer, and especially the edges, for he said to be successful this must be done thoroughly; then caustic potash was applied. Afterward the application

of dilute acetic acid or vinegar, to counteract somewhat the caustic effects of the potash.

Dr. Stelwagon, in a case of psoriasis, treated it as follows:

R.—Liq. potassii arsenitis..... gtt. ij-v.
S. Ter die.

R.—Ung. picis liquidæ..... f 3ij-ijj.
Ung. simplicis..... f 3j.

M.—S. To be rubbed on daily.

The patient was instructed to take baths, to which was added carbonate of soda f 3vj-vijj.

Prof. Brinton, in treating a case of cystitis, advised that the bladder be washed out with warm water to rid it of the accumulated mucus, and then inject 1 per cent. creolin solution.

Dr. Rex presented a boy at the clinic, who had received an injury on the head; subsequent to the injury, these symptoms presented themselves: At intervals the patient has irregular headaches; at times trembling and restlessness; frequently awakens up out of sleep in a frightened condition; at times the patient becomes unconscious. He was given this prescription:

R.—Sodii bromidi..... gr. x.
Chloral hydrat..... gr. iij.
Syr. tolu..... ℥ xx.
Syr. simplicis..... q. s. ad f 3j.

M.—S. Take at night.

Dr. J. Solis-Cohen, at a recent clinic, presented a case of unusual interest, particularly so as regards the treatment. The patient, a man, twenty-two years of age, had for some time complained of soreness of the throat, and hoarseness, which finally resulted in almost complete loss of the voice (aphonia); he suffered from paroxysmal attacks of suffocation, which were relieved by inhalations of chloroform, and the administration of emetics. The trouble apparently was due to a growth of some kind, the nature of which there was no opportunity afforded to examine into. For the relief of the difficult breathing, as well as the safety of the patient, it was decided to do a tracheotomy. Preparatory to the operation the patient was given two injections of ¼ gr. of cocaine on either side of the middle line of the neck; previous to this the patient had taken some whisky and water, so as to obviate the depressing effects of the cocaine. The operation consisted in making an incision from the cricoid cartilage downward to the extent of two inches, then dividing the fasciæ down to the trachea; the fasciæ and muscles were pushed aside and held with retractors. An incision was then made in the trachea below the cricoid cartilage, and a platinum tube inserted; the unique part of the operation being that the patient was perfectly conscious, and responded to questions asked by the operator. The patient did not exhibit the least degree of nervousness.

MEDICO-CHIRURGICAL HOSPITAL.

IN a case of infantile eczema, Shoemaker advised the following plan of treatment: Place child on restricted diet—preferably milk. Avoid use of solid foods and all irritating substances. Clean out the intestinal tract with calomel, gr. j, once a week, followed by a saline—carbonate of magnesia. After feeding give pepsin, gr. iij, and bismuth subnit., gr. iij, suspended in glycerine, f 3ss, to promote digestion. Bathe integument with sweet oil until incrustation has been removed, then apply the following ointment:

R.—Sulphur subl.	3j.
Camphoræ.....	gr. x.
Ol. anthemidis.....	gtt. j.
Creasoti.....	gtt. v.
Ung. aq. rosæ.....	3ss.
Ung. zinci ox. benz.	3j.
M.—Ft. ung.	

After the eruption and incrustation have been removed by treatment, the integument will have an erythematous appearance. To restore the skin to its natural hue the following should be given internally:

R.—Sulphur subl.	gr. j.
Ext. malti, fl.	3j.
S. Three times a day.	

This will give tone to the skin, stimulate the glandular system generally, especially the liver. After the general health of the child has improved, more nutritious diet can be given, such as oyster soups, beef tea, etc.

In a case of pustular eczema affecting the flexor surfaces of the lower limbs, particularly the inner aspect of the thighs, Shoemaker prescribed as follows:

Internally:

R.—Syr. acidi hydriodici.....	f3ij.
Glycerini.....	f3ij.
M.—S. f3j t. i. d.	

Externally:

R.—Ol. morrhuae,	
Ol. cadini.	
M.—S. Rub well into affected parts thrice daily.	

Relative to the treatment of asthma, Prof. Anders remarked as follows:

First break the attack. Give morphine, gr. $\frac{1}{6}$ – $\frac{1}{4}$, but once. If this will not do it, give inhalations of chloroform until relief is obtained. If the attack is not severe, give tr. lobelia, gtt. v–x, every fifteen or thirty minutes, until the attack is over. Alcoholic stimulants, in the form of hot toddy, give relief in some cases. It is difficult to predict what effect an internal remedy will have in this disease. Chloral, given in large doses, gives relief to some. The patient should guard against "taking cold." Clothe warmly, take moderate, but persistent, open-air exercise. To escape nocturnal attacks, he should eat a light supper. If the attacks are due to disordered digestion, the diet must be regulated. To relieve the catarrhal condition of the bronchial mucous membrane, HI or KI should be given. To preserve the integrity of the lung tissue, give:

R.—Liq. potassii arsenitis	℥. v.
Potassii iodidi.....	gr. v.
Syr. sarzæ comp.....	3j.
M.—S. Take after meals.	

Prof. Woodbury showed the class a new drug, recently prepared in this city. It is formed by treating the sulphate of cinchonine with a solution of potassium iodide. It contains about 50 per cent. of iodine, is reddish in color, odorless, and almost tasteless. It has been given the name, iodosulphate of cinchonine. The professor thinks it will prove a good internal antiseptic in the treatment of phthisis. He also suggested its use externally in the treatment of lupus vulgaris.

DR. J. B. CASSADY, of Burlington, N. J., was recently married to Miss Agnes Ashcraft, of New York City.

THE PARASITIC ORIGIN OF CANCER.—The sporozoa are parasites that are widely distributed. We find them in all animals, from man down to the infusoria. Some of them give rise to epidemics of a grave character in animals, as the coccidium in the rabbit—quite a common disease in France, but rarely seen in this country. The sarcosporidium gives rise to an epizootic in sheep and poultry. A number of fish die annually of disease produced by the presence of the myxosporidium. And the organism which has caused such ravages among the silk-worms of France, producing the *maladie de la pébrine*, is the microsporidium.

One of the most characteristic features of these organisms is their seat within the epithelial cells; the nucleus of the containing cell being pressed aside by the parasite. The nuclei of the coccidia are situated sometimes in the center and sometimes at the edge of the protoplasmic mass. The retraction of the latter gives the organism the appearance of a cell in a stage of degeneration, as has so often been attributed to it hitherto. This retraction gives the affected epidermis its cribriform appearance. When the number of these organisms is small, they may not be seen at all in many sections. They are, however, easy to find in the scrapings from the cut surface of the diseased epithelium. Their size is about double or treble that of the adjacent cells, but occasionally they may be enormous, their diameters being nearly equal to one-third of the thickness of the rete malpighii. They are to be found in all the layers of the epidermic portion of the skin. They are more numerous near the first row of the cells of the rete; at this point they are rarely encysted, but appear usually as a mass of nucleated protoplasm, more or less retracted, in the center of a clear space. Higher, the corpuscles are more frequently encysted, and usually larger. In the horny layer they are usually flattened out, and hence are less apparent.

These corpuscles are usually first seen near a nucleus, but they may be some little distance off. They are not found in direct contact with the contents of the cell, but are surrounded by a clear zone, as if they were in the middle of a space hollowed out of the interior of the cell. There is no lining membrane to this cavity, the walls of the cyst-like space consisting merely of a somewhat thickened layer of the adjacent protoplasm. This bright border, perhaps due to shrinkage of the protoplasm, serves to distinguish them readily from the nuclei of the cell. Having emigrated from the nucleus, they appear now as irregular or flask-shaped masses of protoplasm still without a nucleus attaining the size of a diameter of fifteen or more micromillimeters. They do not have any well-defined cell wall. The organism enters now into the free stages of its existence, and may be found between the cells of the cancer or in the ducts of the mammary gland. It soon enters the cancer cells, however, apparently to obtain sustenance from their nuclei. We see now large, irregular, protoplasm-like organism in the protoplasm of the epithelial cell, and separated from it by the bright zone. It may have already attached itself to a nucleus, which it soon surrounds and encloses into its own substance, so that the nucleus of the cancer cell is now embedded in the protoplasm of the parasite. Changes soon begin now to appear in the protoplasm of the cancer cell; its peripheral portion becomes pointed, and takes staining feebly and finally disappears altogether or is pushed aside, leaving the parasite in undisturbed possession of its nucleus.

—Warren, *Boston Med. and Surg. Jour.*

The Times and Register

A Weekly Journal of Medicine and Surgery.

WILLIAM F. WAUGH, A.M., M.D., Managing Editor.
A. E. ROUSSEL, M.D., French Exchanges.
W. F. HUTCHINSON, M.D., Italian and Spanish Exchanges.
C. D. SPIVAK, M.D., Russian and German Exchanges.
GEO. WHARTON McMULLIN, Manager Advertising Department.

THE TIMES AND REGISTER,
FORMED BY UNITING THE
PHILADELPHIA MEDICAL TIMES,
THE MEDICAL REGISTER,
THE POLYCLINIC,
THE AMERICAN MEDICAL DIGEST,
PUBLISHED UNDER THE AUSPICES OF THE
AMERICAN MEDICAL PRESS ASSOCIATION.

Published by the MEDICAL PRESS Co., Limited.
Address all communications to 1725 Arch Street, Philadelphia.
NEW YORK OFFICE: No. 214 East 34th Street (Polyclinic Building).

New York and Philadelphia, February 7, 1891.

POISONING IN DYEING ESTABLISHMENTS.

SOME weeks ago there was reported a case of poisoning at one of the Philadelphia dyeing establishments. Several of the employes entered an apartment that had not been opened for some time, and were overcome by the gases that had collected in the room. None of the cases proved fatal, and all returned to their work on the next day. Being curious to know what agent produced the alarming symptoms, a representative of this journal was directed to visit the works and make an investigation. The proprietors of one of the most extensive dye and print works in the city opened their doors to us, and offered every facility for an examination. We find that these attacks are by no means infrequent; they are not considered dangerous, and in no case have they resulted in anything more serious than a few hours detention from work. There is some uncertainty as to the toxic agent. In the preparation of the dye in question, ferrocyanide of potassium is first treated with sulphuric acid, precipitating the base, and leaving the iron and hydrocyanic acid in solution. There cannot be a large amount of the acid present, as the men who prepare it have their hands covered with it, and experience no bad results. This liquid is then mixed with aniline oil. Starch is finally added, to bring the mass to a proper consistency for printing. It is only when this has been done, and the printing is under way, that the bad effects are shown. The stuff is not heated, but the process goes on in a room which is quite warm and the air charged with steam. Those who inhale the gases arising, sometimes become suddenly unconscious, and fall back. Their bodies become rigid, their lips and noses dusky or bluish, the skin cool. They are immediately carried into the open air, and stimulants given as soon as they can swallow. In a few moments the attack passes off, the patient often working as if in a convulsion, as he comes out of it. A severe headache remains, incapacitating him from work for the remainder of the day. This is the description given

by the proprietors. The attacks are not infrequent, and are not regarded as dangerous. At the same time, measures have been taken to prevent them, by keeping the air of the rooms pure by means of steam extracting fans.

The attacks were at first attributed to the aniline; but the color differs radically from the deep hue seen so frequently since acetanilide has come into general use; a color that does not pass off so quickly.

Wood gives the following symptoms as resulting from hydrocyanic acid: "The symptoms come on suddenly. In a moment or two the individual falls to the ground insensible and convulsed, the respirations arrested or occurring at long intervals, the eyes salient, the pupils dilated, the mouth covered with bloody froth. If less than a fatal dose be taken, deep insensibility, tetanic or clonic convulsions, dilated pupils, a bloated countenance, cyanosed surface, set jaws, and irregular respiration, constitute the chief symptoms. The breathing is mostly convulsive, with deep, forcible expirations, but in some cases it has been stertorous. After small toxic, but not lethal doses of prussic acid, giddiness, lightness of the head, nausea, a quick pulse, and muscular weakness, are the chief symptoms." The description given above approximates this sufficiently to render it probable that the toxic agent is hydrocyanic acid or a derivative. Wood does not mention headache as a symptom on regaining consciousness; but as he relies mainly upon experiments on animals, this symptom may have been overlooked. At the works, it is invariably present.

If prussic acid be in truth the cause of these seizures, it is certainly remarkable that so deadly an agent, one working with such appalling rapidity, could be employed in a form capable of producing such symptoms as those described, in numerous cases, extending over a series of years, without causing death. Nor is it in accordance with the general belief regarding the danger of handling this acid, that no harm results to those whose hands are constantly wet or stained with it.

We are further informed by the employes that no ulterior effect for good or ill has been noted in those who have for years been exposed to these attacks. No difference exists between sober men, drinking men, or drunken men, as regards liability to the attacks. The liability does not become greater or less in time. If some learn to avoid the attacks by using precautions, others would probably go through them willingly, for the sake of the whiskey, and the day's rest following. We believe this is a fair estimate of the very slight importance in which the matter is regarded by the employes. No observation has been made as to the effect of these cyanogen fumes upon tuberculosis; as none of those exposed happen to be consumptives.

DR. SPENCER MORRIS has returned to Philadelphia for the winter, and is drilling the Medico-Chirurgical students in physical diagnosis and hygiene. He is exceedingly popular with the class, and very successful as a teacher.

Annotations.

WE learn with regret of the retirement from further study of animal diseases of Dr. Frank S. Billings, of Chicago. Dr. Billings is the model investigator, ambitious, self-sacrificing, eager for knowledge, and has brought to his investigations the best qualities for which American investigators have been distinguished. His retirement will be a real loss to the country.

IN a carefully-prepared paper, read before the Sanitary Convention at Vicksburg, the proceedings of which are published, Dr. Baker gave official statistics and evidence which he summarized as follows:

"The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over one hundred lives per year from small-pox, four hundred lives per year saved from death by scarlet fever, and nearly six hundred lives per year saved from death by diphtheria—an aggregate of eleven hundred lives per year, or three lives per day, saved from these three diseases. This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

Letters to the Editor.

MOTOR PARESIS FOLLOWING ETHER INJECTIONS.

I INJECTED 30 minims of Squibb's ether into the forearm of a patient in collapse, and whiskey afterward, and am accused by a physician in another town of causing a loss of motion, which now exists, in the hand and forearm.

The patient belonged to another physician, and I was called in his absence.

The next day it was discovered that the power to use the arm was gone, and now, although improved somewhat, the hand is useless.

I am on good terms with the patient, and there is no suit going to arise; but I am being injured in my practice by the report which has spread.

Now, if an injection of ether can injure a nerve or cause such trouble, the profession should know it; and I want to know it also, so as to be on my guard.

W. W. STYLES, M.D.

ESSEX, VT.

[We have never witnessed or heard of such an accident. *A priori*, it would seem highly improbable that a diffusible stimulant like ether could exert any such a permanent paralyzing effect. The hydrated ethyl-oxide is well known to act as a motor and sensory paralyzant when ingested in large quantities, but all the effects pass off in a few hours, unless the dose is repeated. Cold has a like effect on some superficial nerves, especially the facial, and the resultant paralysis may continue for an indefinite period; but the use of counter-irritants, sudorifics, and galvanism produces a speedy cure. It is probable that in the above case the cause of the paralysis is to be found in the affection, producing collapse, or in thrombosis from the enfeebled circulation. At any rate, were the paralysis to be surely due to the injection,

considering the imminent danger of the patient that necessitated the ether injections, she must indeed be ungrateful if the life saved is not more prominent in her thoughts than the paralyzed hand.

—W. F. W.]

A CASE FOR DIAGNOSIS.

PATIENT, Mr. L.; thirty-seven years of age; married; family history, good. In August, 1873, met with an accident by which he was thrown fifteen feet into the air, from a wagon, and fell upon his back. A severe contusion over the sacrum was the principal lesion recognized at the time. Two weeks after the injury he appeared well, with the exception of an uncomfortable sense of fullness in the chest at times, and tenderness at place of injury, both of which symptoms have never entirely disappeared, being worse sometimes than others.

Two years later the stomach became intolerant to food, continuing so for a week or two at a time. During these attacks a spoonful of milk ingested would cause severe pain in the stomach and distressing dyspnoea. At the same time he was capable of considerable physical exertion without exhaustion, and without difficulty in breathing; nor did the forced abstinence from solid and liquid food produce any marked effect upon the system in general. The symptoms mentioned continued for three years, when they began to improve, and for five years prior to 1886 patient seemed to have recovered, with the exception of slight tenderness on pressure over sacrum.

In 1886 Mr. L. was again thrown from a wagon, this time falling on his feet, apparently unhurt. In twenty-four hours afterward he was seized with tonic spasms, the body being bent—generally backward, but sometimes forward, according to position—when seized. The convulsions have continued to the present time. Twenty or thirty may occur in a week, and they may be absent for two or three months. Patient is also subject to bloating, both at time of seizure and at other times. Bloating may disappear in a few minutes, or slowly. Appetite and health between seizures, good. A diarrhoea usually precedes the seizures, and rough walking or riding, and exhaustive work favor their appearance. During seizure patient is conscious, and suffers great pain. The heart becomes irregular, and an abnormal amount of pale urine is passed. Between the attacks, patient suffers sometimes from Cheyne-Stokes respiration, but does not present any mental peculiarity.

O. F. H.

Book Notices.

TEXT-BOOK OF HYGIENE: a comprehensive Treatise on the Principles and Practice of Preventive Medicine from an American Standpoint. By GEORGE H. ROHE, M.D. Second edition. Philadelphia, F. A. Davis, 1890. 8vo., pp. 421. \$2.50.

When Dr. Rohé speaks, it is from the standpoint of common-sense added to a practical experience which is rare. In reading this book we are reminded of Prof. Krauth's definition of common sense, "The common mind of the common man applied to the common things of common life." Every matter which is related, even ever so indirectly, to hygiene is here treated of in a plain, sterling way which cannot fail to be understood by everyone. The author knows his ground thoroughly and brings his reader into an intimate knowledge of it. The book is rather meant

for the general reader than for the specialist, and yet we cannot help thinking that Dr. Rohé has had in view all along the members of his own profession, with a consciousness that his brother physicians are woefully lacking in practical information of this sort. Certainly those who are willing to learn will find here much that will be helpful in their practice. The book is well printed and illustrated, and, at the very reasonable price of publication, should be found in the library of every one interested in personal health and public hygiene.

Mechanical Obstruction in Diseases of the Uterus. By George F. Hulbert, M.D., of St. Louis, Mo.

The Breathing Movements in Relation to Voice Production. By G. Hudson Makuen, M.D., Philadelphia.

Transactions of the American Gynecological Society, Vol. 15, for the year 1890. Philadelphia: WM. J. DORNAN, 1890. In the 411 pages are to be found 21 papers.

The Medical Digest.

NOTES FROM "HOSPITAL GAZETTE."—It is said that the application of a solution of half an ounce of camphor in twelve ounces of turpentine, is efficient in controlling the hypersecretion of milk.

Campi's treatment for tape worm is as follows: Give over night five or six fluid drachms of castor oil. Next morning give early two drachms of thymol divided into twelve doses, one to be taken every fifteen minutes. After taking it the worm will be expelled entire.

Treatment of Gall Stones.—According to the *Bulletin Gen. de Therap.*, Lekarckie makes the assertion that pilocarpine is almost a specific in the treatment of gall stones. It relieves at once the pruritus of jaundice. The dose, hypodermically, is one-eighth of a grain twice a day.

Dr. Shuford (*St. Louis Med. and Surg. Jour.*) states that he has obtained good results by injecting the following in hemorrhoids:

R.—Glycerole of salicylic acid..... 3iv.
Glycerole of boracic acid..... 3iv.
Carbolic acid..... 3iij.

M.—Sig. Inject five to ten minims into each tumor.

Mr. Jonathan Hutchinson, for psoriasis, recommends:

R.—Acid. chrysophanic..... gr. x.
Liquor carbonis detergent..... ℥ x.
Hydrargyri ammon. chlorid..... gr. x.
Adipis benzoat..... 3j.

M.—Fiat unguentum.

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation.

Dr. E. P. Hurd advises the following prescription for headaches of all kinds:

R.—Caffeini citrat.,
Ammonii. carb..... 3j.
Elixir guaranæ..... 3j.

M.—Sig. 3j every hour until the pain is relieved.

The following pills have been recommended for dysmenorrhœa:

R.—Pulv. camphoræ..... gr. x.
Pulv. doveri..... gr. xx.
Ext. hyoscyami..... gr. x.

M.—Ft., pil. x.

Sig. Two pills every two hours till pain ceases.

LANE (*Lancet*) reports the case of a youth in whom epilepsy followed a depressed fracture produced by forceps at birth. The convulsions occurred first when he had reached the age of fourteen years, and for two years he continued to have fits at various intervals, which were sufficient to prevent his following any occupation. The depression was on the right side, extending from an inch behind the coronal suture to the same distance in front of the lambdoid. The left arm and leg were weaker than the right, and there was a marked difference in the clonus and knee reflexes which were more manifest on the left side. On operating, the bone was found to encroach slightly on the cranial cavity, and to be very vascular. The depressed portions were removed since the operation. The fits are milder and less frequent. The general nervous condition has greatly improved, so that the boy is now able to follow an occupation. The operator hopes that the fits, now slight and rare, will soon cease to recur.

THE PHONOGRAPH IN TESTING HEARING.—The thought that the phonograph would theoretically give the desired means of testing the hearing occurred to me long ago, as it has probably occurred to many others. It is, however, only recently that I have been able to use it in my own practice. In speaking in Berlin with Prof. Trautmann upon this subject, he expressed the belief that it would prove useless in testing imperfect hearing, because of the necessity of using a tube in the ear to transmit the sound, and because of the slight volume of the sound. My own method of using the instrument is to dispense with all connection by tube with the patient's ear, measuring the distance in meters or feet at which the patient can repeat words previously spoken into a cylinder turning at a certain speed and then reproduced by the phonograph. The patient is placed at first beyond hearing distance, and then gradually brought nearer the instrument. I then record name of patient, date, and hearing record upon this same cylinder, either giving same to the patient, or keeping it carefully put away. In addition to this voice test, I test through a tube one meter long, the softest whisper which the patient can distinguish.—Fiske, *Western Med. Reporter*.

TREATMENT OF CANCER.—Such treatments of cancer as Chian turpentine and electricity should be largely limited to inoperable cases. In these their further trial can do no harm, and at least fulfil the humane purpose of adding the buoyant influences of hope to a doomed life.

Of other means of treatment there remain but the various means of local destruction of the new growth. In our day of dread of pain and horror of filthy wounds these means may be reduced to a few. In all cases admitting of it, free excision under all possible antiseptic precautions; where this is not possible, removal of diseased tissue by the curette and application of the actual cautery. I have not met with a case of carcinoma in which one or the other of these methods was not preferable to any other form of destructive local treatment, such as caustics, ligature, congelation, pressure, etc. I have seen very excellent work done by Kaposi, in epithelioma of the face, with caustics, but I find patients prefer to take an anæsthetic and undergo curetting and actual cauterization. It is cleaner, quicker and accompanied by less suffering. I trust it is no longer necessary to argue whether one means of local destruction is more curative than another. Whether an excision wound heals by first

intention, by granulation or cicatrization from caustics, makes no difference whatever in the effect upon the neoplasm, but it has considerable bearing upon the comfort and safety of the individual. In some instances where local removal cannot be complete, it is possible that extensive cicatrization presents a barrier to the rapid progress of the affection, but the cicatrization following the hot iron is certainly as effective as any and is often useful in certain palliative operations. When applicable the knife is the best remedy. The mortality of amputations of the penis at least is pretty clearly shown to be 10 per cent. greater when done with the thermo-cautery than when done by the knife.—Dunn, *Northwestern Lancet*.

OPERATING ON TUBERCULAR PERITONITIS.—Dr. J. F. W. Ross, writing in *The Canadian Practitioner* on this subject, says: As regards diagnosis, the fact must be emphasized that the main points were the irregular tympanitic sounds on percussion; the presence of free fluid in the abdomen, shown by the flattening of the front of the abdomen and bulging of the loins upon tension of the recti; the muffled sounds of resonance; the "far away" wave of fluctuation, giving one the idea of the presence of a thickened peritoneum between the fluid and the fingers; the high temperature, coated tongue, cachectic appearance. Of course, malignant disease of the peritoneum will produce just such symptoms. In cases where there is no collection of fluid and no thickening of the peritoneum, a diagnosis is not possible without an exploratory incision.

As to treatment, drainage was not at all necessary; a cure could be effected or life prolonged by removal of fluid, and that removal should be effected by exploratory incision, and not by dangerous trocar puncture—such incision clearing up the diagnosis, as well as relieving the patient. With the knife and the finger, the operator knows where he is going and what he finds. If pleuritic effusion, so often tubercular, can be cured by removal of the fluid, there is no reason why the same should not hold good in the abdomen.

SOME CAUSES OF DEATH IN DIPHTHERIA.—Death, if not due to the laryngeal asphyxia, may occur from extension of the membrane into the bronchi, from bronchitis, or from broncho-pneumonia. I once admitted a small girl into a surgical ward, who had swallowed some boiling water from a kettle. She had typical membrane on her tonsils and uvula, stridulous breathing, croupy cough, and a metallic tone of voice. There was some recession of the chest during inspiration in Harrison's sulcus, and in the supra-clavicular spaces. She soon got rid of the membrane in the throat, coughed up some from the larynx, and quickly recovered. That was membranous laryngitis, though it owned a traumatic origin.

Again, may catarrhal laryngitis ever be diphtherial? Although false membrane is *per se* the sign of diphtheria, yet, as mentioned above, we may get in epidemics a catarrhal affection of the fauces indisputably diphtherial, but stopping short of the formation of the diphtheritic false membrane; so we may probably get a catarrhal laryngitis only—but indisputably diphtherial—which does not develop any membrane whatever. In the cases analyzed for this paper, there was generally but little doubt as to their being genuinely diphtherial in their origin.

Five of them died of asphyxia from the presence of membrane in the larynx and trachea, 21 from its extension into the bronchi, 4 from bronchitis, and 1

from secondary pneumonia. In all but 2 of these cases tracheotomy was performed.

—Simpson, *The Practitioner*.

THE GENERAL PRACTITIONER'S TREATMENT OF CHRONIC ATROPHIC RHINITIS.—From the nature of the disease, and the abnormal secretions which it causes, one can easily understand that two features of treatment are indicated, viz.: cleanliness and stimulation—cleanliness so that there can be no irritation from the presence of scabs, and for the thorough application of medicines; and stimulation to counteract the passive inflammation, and to cause the mucous membrane to approximate more nearly the normal by filling it with wholesome blood.

Cleanliness does not mean promiscuous douching or spraying of the nose. The greatest care must be taken to remove every scab and particle of abnormal discharge. This can be done by the general practitioner readily enough, and his armamentarium need not be very extensive. A lamp—a student's lamp being preferable—a head mirror, a nose speculum, a small cotton applicator (a knitting-needle with one end roughened will answer) constituting an equipment, not elegant, but sufficient. The cost, exclusive of the lamp, is little enough, being less than \$4. Cotton, absorbent or borated, should be on hand, as well as plenty of Dobell's solution, or the following modification, which I like better:

R.—Sodii bicarbonatis,
Sodii biboratisāā ʒij.
Listerine or "katharmon"ʒss.
Aquæ q. s. adʒviij.

M.—Sig. Nosewash.

—Loeb, *Medical News*.

SUPPURATIVE TONSILLITIS.—Dr. Clarence C. Rice thus sums up his conclusions on this subject.

I would like to state my belief in the following propositions:

1. That the tonsils, like other lymphoid tissue, are blood-elaborating glands.
2. That when they are in normal condition they probably perform a second function by reason of the large number of leucocytes contained in them, and this function, if not aggressive, at least possesses the power to prevent the entrance of pathogenic germs through the crypts of the tonsil.
3. That when the tonsils have ceased to perform their function, by reason of such pathological conditions as interstitial thickening and occlusion of the lacunæ of the glands, they probably present open-mouthed viaducts through which pathogenic germs may pass to the lymphatic circulation.
4. That all kinds of tonsillar inflammation are due to septic causes, or, in other words, to specific germs, and that those causing follicular disease, parenchymatous disease, and peritonsillar abscess, are different from one another.
5. It is believed, therefore, that septic influences are the exciting cause of tonsillar inflammation, and that the presence of pathological tonsils—tonsils unable to perform their physiological function—is the chief predisposing cause.
6. That a classification of tonsillar inflammation into three varieties is sufficient, viz., follicular, parenchymatous, and peritonsillar abscess.
7. That suppurative tonsillitis is not a correct name, because the suppuration occurs in the connective tissue about the tonsils and very rarely in the tonsils themselves.
8. That in people who possess the disposition to suppuration about the tonsils we find the tonsils

either adherent to, or covered by, the pharyngeal pillars, and that this condition plays a more important rôle in the predisposition to suppuration about the tonsil than does the rheumatic or other diathesis.

9. That when a tonsil shows itself competent at short intervals to become inflamed or to give rise to peritonsillar suppuration, it is in a pathological condition and should be destroyed by the galvano-cautery or by other measures.—*Med. Record.*

IMMENSE OVARIAN CYSTS.—There are vague references in medical literature to the immense size of ovarian tumors removed by this or that operator, but upon investigation their authenticity cannot be established. My own case was that of Mrs. B., aged thirty years; native of Jackson County, Indiana; married five years ago; no children. She says the enlargement of her abdomen was first observed after an attack of typhoid fever when sixteen years old, and from then until now, fourteen years, the growth has been gradual. Menstruation is regular and painless; appetite good. Her expression is cheerful, and she says except for the discomfort of the size of her abdomen she is as well as any woman in the land. Weight, two hundred and ninety pounds. Examination of this woman revealed a distension of the abdominal cavity beyond anything I thought the human belly capable of. Her naturally large frame rendered the enlargement less conspicuous, yet it was mammoth. Fluctuation could be freely elicited in all parts and entirely through the distension; circumference at navel, sixty-six and one-half inches; no edema of lower extremities; locomotion surprisingly good. Diagnosis, ovarian cyst, an operation advised. June 5, 1889, Drs. Yandell, Bailey, Burnett, Wilson, and others being present, the operation was performed. The patient could not lie on her back, so was placed on the right side. An incision four inches long was made, and the sac emptied by trocar. Twelve gallons of chocolate colored fluid were removed, when the sac was found free from adhesions. After ligation of the pedicle and removal of sac, the cavity was dried and closed without irrigation or drainage. The quantity of redundant skin was quite enough to fill a half-bushel measure. After the external dressing was applied, and this was abundant in order to fill in space and make pressure, long adhesive straps were placed over the dressing and attached to the side and back. Time of operation, about thirty minutes. There was no appreciable shock, and reaction was prompt. No nausea or vomiting. The progress of the case was entirely without incident; temperature never went above 99° F., and no opium was given. Bowels moved by saline and enema on third day; after fourth day ordinary diet allowed. First dressing and stitches removed on ninth day. Union *per primam*. Sat up on twelfth day, and returned home, a distance of seventy miles, on the nineteenth day after operation. I received a letter from her husband dated August 21, in which he says, "My wife goes where she pleases, has been to Ewington (six miles) three times." The operation was performed two days after menstruation, and she menstruated without pain at her following period. As stated before, there were just twelve gallons of fluid collected, which weighed one hundred and eight pounds; the sac weighed three and one-half pounds, making a total of one hundred and eleven and one-half pounds. This is, I think, the largest unilocular cyst ever removed by operation.

At this date, more than eighteen months since the operation, the patient is in the best of health.

—Cartledge, *Amer. Pract. and News.*

Medical News and Miscellany.

CATS are said to be immune against the narcotic effects of morphine.

A STEADY decrease is reported of the number of cases of cholera in Florence, Italy.

A CHINESE doctor prescribed a blister applied to the top of the head, to draw into its proper place a prolapsed uterus.

DR. GEO. A. HALL, of Chicago, leased a house to a tenant; whose son died, of sewer-gas, as alleged; and now the doctor is sued for \$20,000 damages.

Moral: Don't own real estate.

LUYS claims that he can deliver women without pain, by the method of fascination. There is not, as a rule, much fascination about parturition; the stock of that quality being exhausted previously.

DR. W. STUART PALM, writing to the *Lancet*, notices a case of eczema caused by Virginian creeper. The effect seems to have been much the same as that caused in this country by the poisonous ivy.

DR. W. ARBUTHNOT LANE reports in the *Lancet* a case of epilepsy following on a depressed fracture produced by forceps at birth, in which the removal of depressed bone was attended with great benefit to the patient.

THERE is a good opening for a physician at Manassas, Va., two of the leading physicians having recently died. This locality proved very fatal to Northern men in the early sixties, but at present it is much more healthful.

A CIRCULAR just received from a reliable manufacturing house announces that they will sell one hundred 1-grain quinine pills for twenty-five cents. Will the gentlemanly retailer who still charges two cents per grain for quinine please notice?

IN a case of dysentery that had resisted the most approved treatment for over two years, a fish-bone was discovered to be impacted in the rectum. When the bone was removed, the dysentery disappeared. Christian science couldn't be much worse.

THE race question, the problem of all Southern States, is the question with which the North Carolina school superintendent wrestles in his last report. The great need is white teachers to teach the colored children. There is a great field for medical mission work down there.

ACCORDING to the last census, the drug trade consumed, in 1890, 10,976,842 gallons of distilled spirits. Of this quantity, New York took 1,760,343 gallons; Illinois, 1,306,322; and Pennsylvania, 1,142,941. The wholesale druggists and the manufacturers used 7,966,640 gallons; the hospitals 102,790, and the retail druggists dispensed 2,907,412, in soda-sticks and tinctures.

ACCORDING to Madame Lachapelle, who appears to be the "boss" midwife of Paris, the real remedy for the depopulation of France, over which such a howl of consternation has been raised, would be to restrict the number of midwives on the ground that the ease with which the diploma is at present obtained, causes such competition for existence in their ranks that many, if not most, are fain to eke out a miserable existence by procuring abortions wholesale.

WE are desired to note that George Keil is about to issue another edition of his Register of the Physicians of Pennsylvania, New Jersey and Delaware. He desires to obtain the name and address of every physician in those States, with date and place of graduation, etc. His address is 1715 Willington street, Philadelphia, Pa. We understand that the coming edition is in the hands of a printer this year, instead of the people who made such a botch of the last.

At the Chicago Medical Society, Dr. Salisbury reported the case of a medical student with peritonitis, in whom the temperature reached 115°; and on several occasions the bulb of the thermometer burst while in the patient's axilla. Ordinary thermometers not proving equal to the occasion, others were employed, but the girl proved equal to the occasion, and sent the index up to the very respectable figure of 482° F.

The possibility of causing an abnormal record by compressing the bulb between the arm and the side may be considered in this connection.

DRS. SHURLEY AND GIBBES, of Ann Arbor, lectured in the Chicago Post-Graduate College last Friday, January 23, upon their remedy for tuberculosis. Dr. Gibbes dwelt upon the distinction to be drawn between the tubercular and the simple inflammatory form of consumption.

Dr. Shurley then described the experiments made to combat the effects of the toxins generated by inflammation. Various chlorine and iodine compounds were tried, but without much success. Finally they inoculated guinea-pigs with iodine and the double chloride of gold and sodium. These animals were found to be proof against tubercular inoculations. After the meeting, Drs. Shurley and Gibbes were entertained by Dr. F. H. Martin and his wife, at a reception.—*Chicago News*.

PATENTS, ETC., on medical subjects, issued January 27, 1891:

Making anhydrous ammonia.	P. J. McMahon.....	New Orleans, La.
Dental anodyne.	J. W. Hartigan.....	Morgantown, W. Va.
Dental bridge-work.	E. B. Call.....	Peoria, Ill.
Cough remedy.	M. E. Hess.....	Foristell, Mo.
Scalpel.	S. Yankauer.....	New York, N. Y.
Artificial tooth (two patents).	A. Page and S. S. Bloom.....	Philadelphia, Pa.

TRADE-MARKS.

Remedy for kidney and liver diseases. (The words "The Great Vitalizer" and "German System Tonic," and the portrait of Mr. Jesse M. McFarland).	The Harter Medical Co.....	Sedalia, Mo.
Embrocation. (The word "Anti-Stiff").	J. Wilson.....	Chiselhurst, England.
Medicine for inhalation. (The words "Anti-Bacteria Inhalation," and the representation of a splash of blood).	G. W. Mowry.....	Rochester, N. Y.

LABEL.

"Dr. Warren's Insomnia Cure".	J. N. Murdoch.....	Parkersburg, W. Va.
-------------------------------	--------------------	---------------------

CHARLES J. GOOCH, Patent Attorney.
LOCK BOX 76, WASHINGTON, D. C.

BIRTHS AND DEATHS IN LONDON.—The weekly return of births and deaths, for the week ending Saturday, January 10, shows that in London 2,816 births and 2,505 deaths were registered. Allowing for increase of population, the births were 305 below, while the deaths exceeded by 490, the average numbers in the corresponding weeks of the last ten years. The annual death-rate per 1,000 from all causes was 29.1.

The 2,505 deaths included 76 from measles, 16 from scarlet fever, 28 from diphtheria, 76 from whooping-cough, 9 from enteric fever, 1 from an ill-defined form of continued fever, 13 from diarrhoea and dysentery, and not one from small pox, typhus, or cholera; thus, 219 deaths were referred to these diseases, being 12 below the corrected average weekly number.

"THE body has been parcelled out,
For doctors' benefit, no doubt,
Divided up so very nice
That every one can get a slice.
To one they gave the fingers, toes,
Another gets the eyes and nose;
A third, more greedy for his part,
Has gobbled up the lungs and heart.
For his untiring ceaseless pen,
They gave the pancreas to Senn."

—Dewey.

TO CONTRIBUTORS AND CORRESPONDENTS.

ALL articles to be published under the head of original matter must be contributed to this journal alone, to insure their acceptance; each article must be accompanied by a note stating the conditions under which the author desires its insertion, and whether he wishes any reprints of the same.

Letters and communications, whether intended for publication or not, must contain the writer's name and address, not necessarily for publication, however. Letters asking for information will be answered privately or through the columns of the journal, according to their nature and the wish of the writers.

The secretaries of the various medical societies will confer a favor by sending us the dates of meetings, orders of exercises, and other matters of special interest connected therewith. Notifications, news, clippings, and marked newspaper items, relating to medical matters, personal, scientific, or public, will be thankfully received and published as space allows.

Address all communications to 1725 Arch Street.

Army, Navy and Marine Hospital Service.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from January 20, to January 26, 1891.

By direction of the Secretary of War, the extension of leave of absence, on account of sickness, granted Major Stevens G. Cowdrey, Surgeon, in Special Orders, No. 302, December 27, 1890, from this office, is still further extended two months on surgeon's certificate of disability. Par. 13, S. O. 19, A. G. O., Washington, D. C., January 23, 1891.

By direction of the Secretary of War, Major William H. Gardner, Surgeon, is relieved from further duty in the field, and will return to his proper station. Par. 2, S. O. 19, A. G. O., Washington, D. C., January 23, 1891.

Changes in the Medical Corps of the U. S. Navy for the week ending January 31, 1891.

CRANDALL, R. P., Assistant-Surgeon. Ordered to examination, preliminary to promotion.

BERRYHILL, T. A., Passed Assistant-Surgeon. Detached from "McArthur" and wait orders to "Marion."

JONES, W. H., Surgeon. Detached from "Swatara," proceed home, and granted six weeks leave.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service for the four weeks ending January 24, 1891.

BAILHACHE, P. H., Surgeon. Granted leave of absence for seven days. January 12, 1891.

PURVIANCE, GEORGE, Surgeon. To proceed to Pittsburgh and Erie, Pennsylvania; Cleveland and Toledo, Ohio; Detroit, Michigan; and Buffalo, New York, as Inspector. December 29, 1890.

CARRINGTON, P. M., Passed Assistant-Surgeon. Granted leave of absence for seven days. January 16, 1891.

GEDDINGS, H. D., Assistant-Surgeon. To report in person to the Supervising Surgeon-General, January 16, 1891. Detailed for special duty, port of Georgetown, D. C., January 19, 1891.

STIMPSON, W. G., Assistant-Surgeon. To proceed to New Orleans, La., for temporary duty. January 6, 1891.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S LITHIATED HYDRANGEA.

FORMULA.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grains of chemically pure Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis, it is invariably of definite and uniform therapeutic strength, and hence can be depended upon in clinical practice.

DOSE.—One or two teaspoonfuls four times a day (preferably between meals).

THE solution and elimination of an excess of uric acid and urates is, according to many authorities, best attained by intelligent combination of certain forms of Lithia and a Kidney Alternative.

The ascertained value of Hydrangea in Calculous Complaints and Abnormal Conditions of the Kidneys, through the earlier reports of Drs. Atlee, Horsley, Monkur, Butler and others, and the well-known utility of Lithia in the diseases of the Uric Acid Diathesis, at once justified the therapeutic claims for Lambert's Lithiated Hydrangea when first announced to the Medical Profession, whilst subsequent use and close clinical observation have caused it to be regarded by Physicians generally as the best and most soothing Kidney Alternative and Anti-Lithic agent yet known in the treatment of Urinary Calculus, Diabetes, Gout, Cystitis, Rheumatism, Hæmaturia, Bright's Disease, Albuminuria and Vesical Irritations generally.

BRIGHT'S DISEASE.

DIETETIC NOTE.—A rigid milk diet has given good results in many cases.

Allowed.—Fish, sweet breads, sago-tapioca, macaroni, baked and stewed apples, prunes, etc.; spinach, celery, lettuce, etc., may be used in moderation in connection with a milk diet, without impairing its effect, and with great comfort and enjoyment to the patient.

Avoid.—Strong coffee and tea, alcoholic stimulants, soups and mad fishes.

We have had prepared for the convenience of Physicians Dietetic Notes, suggesting the articles of food to be allowed or prohibited in several of these diseases.

These Dietetic Notes have been bound in the form of small perforated slips for Physicians to distribute to their patients. Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of diseases.

LAMBERT PHARMACAL COMPANY,

314 N. Main St., St. Louis.

Please mention The Times and Register.

GOUT.

DIETETIC NOTE.—A mixed diet should be adopted, the nitrogenous and saccharine articles being used in limited amounts.

Allowed.—Cooked fruits without much sugar, tea and coffee in moderation. Alcoholic stimulants, if used at all, should be in the form of light wines or spirits well diluted. The free ingestion of pure water is important.

Avoid.—Pastry, malt liquors, and sweet wines, are veritable poisons of these patients.



CH. MARCHAND'S PEROXIDE OF HYDROGEN, (MEDICINAL) H₂O₂ (ABSOLUTELY HARMLESS.)

Is rapidly growing in favor with the medical profession. It is the most powerful antiseptic known, almost tasteless, and odorless. Can be taken internally or applied externally with perfect safety. Its curative properties are positive, and its strength and purity can always be relied upon. This remedy is not a Nostrum.

A REMEDY FOR

DIPHTHERIA; CROUP; SORE THROAT, AND ALL INFLAMMATORY DISEASES OF THE THROAT.

OPINION OF THE PROFESSION.

Dr. Geo. B. Hope, Surgeon Metropolitan Throat Hospital, Professor Diseases of Throat, University of Vermont, writes in an article headed "Some Clinical Features of Diphtheria, and the treatment by Peroxide of Hydrogen" (*N.Y. Medical Record*, October 13, 1889). Extract:

"... On account of their poisonous or irritant nature the active germicides have a utility limited particularly to surface or open wound applications, and their free use in reaching diphtheritic formations in the mouth or throat, particularly in children, is, unfortunately, not within the range of systematic treatment. In Peroxide of Hydrogen, however, it is confidently believed will be found, if not a specific, at least the most efficient topical agent in destroying the contagious element and limiting the spread of its formation, and at the same time a remedy which may be employed in the most thorough manner without dread of producing any vicious constitutional effect."

"In all the cases treated (at the Metropolitan Throat Hospital), a fresh, standard Marchand preparation of fifteen volumes was that on which the experience of the writer has been based."

Dr. E. R. Squibb, of Brooklyn, writes as follows in an article headed "On the Medical Uses of Hydrogen Peroxide" (*Gaillard's Medical Journal*, March, 1889, p. 307), read before the Kings County Medical Association, February 5, 1889:

"Throughout the discussion upon diphtheria, very little has been said of the use of the Peroxide of Hydrogen, or hydrogen dioxide; yet it is perhaps the most powerful of all disinfectants and antiseptics, acting both chemically and mechanically upon all excretions

and secretions, so as to thoroughly change their character and reactions instantly. The few physicians who have used it in such diseases as diphtheria, scarlatina, smallpox, and upon all diseased surfaces, whether of skin or mucous membrane, have uniformly spoken well of it so far as this writer knows, and perhaps the reason why it is not more used is that it is so little known and its nature and action so little understood."

"Now, if diphtheria be at first a local disease, and be auto-infectious; that is, if it be propagated to the general organism by a contagious virus located about the tonsils, and if this virus be, as it really is, an albuminoid substance, it may and will be destroyed by this agent upon a sufficient and a sufficiently repeated contact. . . . A child's nostrils, pharynx and mouth may be flooded every two or three hours, or oftener, from a proper spray apparatus with a two volume solution without force, and with very little discomfort; and any solution which finds its way into the larynx or stomach is beneficial rather than harmful, and thus the effect of corrosive sublimate is obtained without its risks or dangers."

Further on Dr. Squibb mentions that CHARLES MARCHAND is one of the oldest and best makers of Peroxide of Hydrogen, and one who supplies it to all parts of the country.

CAUTION.—By specifying in your prescriptions "Ch. Marchand's Peroxide of Hydrogen (Medicinal)," which is sold only in ¼-lb., ½-lb., and 1-lb. bottles, bearing my label and signature, you will never be imposed upon. Never sold in bulk. PREPARED ONLY BY

Charles Marchand

A book containing full explanations concerning the therapeutical applications of both CH. MARCHAND'S PEROXIDE OF HYDROGEN (Medicinal) and GLYCOZONE, with opinions of the profession, will be mailed to physicians free of charge on application.

☞ Mention this publication.

SOLD BY LEADING DRUGGISTS.

Chemist and Graduate of the "Ecole Centrale des Arts et Manufactures de Paris" (France).
Laboratory, 10 West Fourth Street, New York.

Notes and Items.

BROKEN-HEARTED lovers should bear in mind that Cupid is a capital tinker.

THERE is something peculiar about Jay Gould's name. He has to think of "u" when he writes his name, but his whole existence is centered on what his name spells without reference to "u."

THE VISITOR (viewing the new baby): "Do you think he is going to resemble his father?"

The Mother: "I shouldn't be surprised. He keeps me up every night."

"My barber told me a very funny story this morning," said Smithers.

"I judge from the condition of your face it was illustrated with cuts," put in Wiggles.

POLICE JUDGE: "Come, you'd better plead guilty. You'll get off easier."

Patsy (the tramp): "Aw, I'm dead onto you. Yer wants to go to dinner, don't yer?"

CHOLLEY'S father was a baron in the jolly isle of Bull, And the girl he sought to marry had a father rich in wool: Said her father, "Let us test him," and the Yankee girl said, "Lets:"

And they said he was no baron when they found he paid his debts.



Opera, Field, and Marine Glasses,
LORNETTES,
Loring Ophthalmoscopes, Artificial Eyes.
H. W. Hunter, Optician,
1145 Broadway, - New York.

SVAPNIA

OR

PURIFIED OPIUM

FOR PHYSICIANS USE ONLY.

Contains the Anodyne and Soporific Alkaloids, Codeia, Narceia and Morphia. Excludes the Poisonous and Convulsive Alkaloids, Thebaine, Narcotine and Papaverine.

SVAPNIA has been in steadily increasing use for over twenty years, and whenever used has given great satisfaction.

TO PHYSICIANS OF REPUTE, not already acquainted with its merits, samples will be mailed on application.

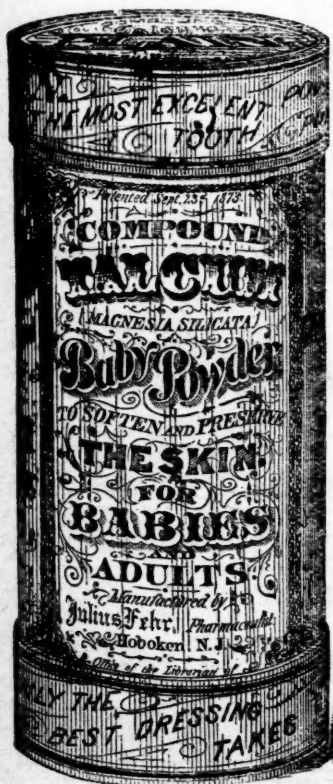
SVAPNIA is made to conform to a uniform standard of Opium of Ten per cent. Morphia strength.

JOHN FARR, Manufacturing Chemist, New York.

C. N. CRITTENTON, Gen'l Agent, 115 Fulton St., N. Y.

To whom all orders for samples must be addressed.

SVAPNIA IS FOR SALE BY DRUGGISTS GENERALLY.



J. FEHR'S "COMPOUND TALCUM" "BABY POWDER,"

THE
"HYGIENIC DERMAL POWDER,"
FOR
INFANTS AND ADULTS.

COMPOSITION: Silicate of Magnesia with Carbolic and Salicylic Acids.

PROPERTIES: Antiseptic, Antizymotic, and Disinfectant.

USEFUL AS A
GENERAL SPRINKLING POWDER,

With positive Hygienic, Prophylactic, and Therapeutic properties.

Good in all affections of the skin.

Sold by the drug trade generally.

Per Box, plain, 25c.; perfumed, 50c. . . . Per Dozen, plain, \$1.75; perfumed, \$3.50.

THE MANUFACTURER:

JULIUS FEHR, M.D., Ancient Pharmacist,
HOBOKEN, N. J.

Only advertised in Medical and Pharmaceutical prints.

GRIFFITH & CO.'S COMPOUND MIXTURE OF GUAIAC, STILLINGIA, ETC.

After six years of thorough trial, is now considered the standard remedy

FOR ACUTE AND CHRONIC RHEUMATISM, GOUT, LUMBAGO, NEURALGIA, AND KINDRED COMPLAINTS.

TO PHYSICIANS.—Gentlemen: We would respectfully draw your attention to our Compound Mixture of Guaiac, Stillingia, etc. This is not a new preparation, but has been in constant use by many prominent practitioners of medicine for several years, and its beneficial results in the treatment of the diseases indicated, including Syphilitic troubles, have been fully established. When ordering this preparation, in order to avoid delay or misunderstanding, physicians will please specify "GRIFFITH & CO.'S" or physicians in the city can send their patients direct to our pharmacies, at No. 67 Third Ave., cor. 11th St., or 2241 Third Ave., cor. 122d St., New York, where, at any time, further information will be cheerfully furnished. Out of town physicians can order through their druggists or direct from us. We have hundreds of testimonials from prominent physicians who have prescribed and personally used this mixture. It is manufactured for PHYSICIANS' PRESCRIPTIONS only. Always specify GRIFFITH & CO.'S. If you have an obstinate case of Rheumatism under treatment, inclose one dollar and receive, by express, a regular size bottle, or we will send, upon request, a sample bottle, providing you will pay express charges. Wholesale Price List—8-ounce size, \$10.50 per dozen; 16 ounce size, \$20.00 per dozen. In lots of one dozen and upwards, we prepay express charges to any point east of the Rocky Mountains. (Do not overlook this offer, for you may be pleased, and possibly surprised at the result, for the general verdict of the profession is that if this remedy fails to act it is a difficult matter to find something that will.)

P. S.—The advertising of this article is confined strictly to Medical Journals

Very respectfully,

GRIFFITH & CO., CHEMISTS AND PHARMACISTS, { 67 Third Ave., cor. 11th St., NEW YORK.
2241 Third Ave., cor. 122d St.,

Carried in stock by the principal Wholesale Druggists in the U. S.

LANOLINE LIEBREICH.

PATENTED.

The New Base for Salves and Ointments, is of White Color and Perfectly Odorless; for Burns, Wounds and all Skin Diseases. Has Valuable Antiseptic Properties.

Anhydrous Lanoline, Toilet Lanoline in Tubes; Lanoline Soap, Lanoline Cold Cream and Lanoline Pomade.

MANUFACTURED BY

Messrs. Benno-Jaffe & Darmstædter, Martinikenfelde, Germany.

J. MOVIUS & SON, New York,

Successors to LUTZ & MOVIUS.

SOLE LICENSEES FOR U. S.

Please mention The Times and Register.



The BEST WINTER HOME for Invalids in the Northern States.

THE BATTLE CREEK SANITARIUM,

Located at Battle Creek, Mich.

This is not a hospital, an invalids' home, a mineral spring establishment, or a health resort; but a scientific medical establishment in which are combined the advantages of the best sanitary conditions, a steady but not extremely cold winter climate, Baths, Electricity, Massage, Movements; and all the physiological remedies in every form, with all other approved remedial arrangements, Classified Diets, Gymnastic Training, careful supervision. Well trained and experienced Physicians. Skilled Attendants and Nurses. Incurable cases not received.

THE SANITARIUM HOSPITAL offers to surgical cases, especially in gynecological surgery, advantages which are unequalled in this country. 10,000 cubic feet of air per hour for each patient. Skilled nurses, experienced surgeons, aseptic wards, and thoroughly aseptic methods in operations. Unexcelled success. Private room and nurse for each patient, the comforts of home, with hospital and sanitarium advantages.

EXPENSES, \$12 to \$30 a week.

For descriptive circular and further particulars, address

SANITARIUM,

or J. H. KELLOGG, M.D., SUPT., Battle Creek, Mich.

NEW YORK

POLYCLINIC

AND

HOSPITAL.

A Clinical School for Graduates in Medicine and Surgery.

DIRECTORS.

PROF. FORDYCE BARKER, M.D., LL.D.
THOMAS ADDIS EMMET, M.D., LL.D.
PROF. T. GAILLARD THOMAS, M.D.
PROF. ALFRED L. LOOMIS, M.D., LL.D.
LEONARD WEBER, M.D.
HON. EVERETT P. WHEELER.

H. DORMITZER, Esq.
JULIUS HAMMERSLAUGH, Esq.
HON. B. F. TRACY.
CHARLES COUDERT, Esq.
REV. THOMAS ARMITAGE, D.D.
W. A. BUTLER, Esq.

WILLIAM T. WARDWELL, Esq.
GEORGE B. GRINNELL, Esq.
HON. HORACE RUSSELL.
FRANCIS R. RIVES, Esq.
SAMUEL RIKER, Esq.

FACULTY.

JAMES R. LEAMING, M.D., Emeritus-Professor of Diseases of the Chest and Physical Diagnosis; Special Consulting Physician in Chest Diseases to St. Luke's Hospital.
EDWARD B. BRONSON, M.D., Professor of Dermatology; Visiting Dermatologist to the Charity Hospital; Consulting Dermatologist to Bellevue Hospital (Out-door-Department).
A. G. GERSTER, M.D., Professor of Surgery; Visiting Surgeon to the German and Mt. Sinai Hospitals.
V. F. GIBNEY, M.D., Professor of Orthopaedic Surgery; Orthopaedic Surgeon to the Nursery and Child's Hospital; Surgeon-in-Chief to the Hospital for Ruptured and Crippled.
LANDON CARTER GRAY, M.D., Professor of Diseases of the Mind and Nervous System; Attending Physician to Hospital for Nervous and Mental Diseases, and to St. Mary's Hospital.
EMIL GRUENING, M.D., Professor of Ophthalmology; Visiting Ophthalmologist to Mt. Sinai Hospital, and to the German Hospital.
PAUL F. MUNDE, M.D., Professor of Gynecology; Gynecologist to Mt. Sinai Hospital; Consulting Gynecologist to St. Elizabeth's Hospital.
A. R. ROBINSON, M.B., L.R.C.P. and S. (Edin.), Professor of Dermatology; Professor of Normal and Pathological Histology in the Women's Medical College.
DAVID WEBSTER, M.D., Professor of Ophthalmology; Surgeon to the Manhattan Eye and Ear Hospital.
JOHN A. WYETH, M.D., Professor of Surgery; Visiting Surgeon to Mt. Sinai Hospital; Consulting Surgeon to St. Elizabeth's Hospital; Secretary of the Faculty.
W. GILL WYLLIE, M.D., Professor of Gynecology; Gynecologist to Bellevue Hospital; President of the Faculty.
R. C. M. PAGE, M.D., Professor of General Medicine and Diseases of the Chest; Physician to St. Elizabeth's Hospital; Attending Physician to the Northwestern Dispensary, Department of Chest Diseases.

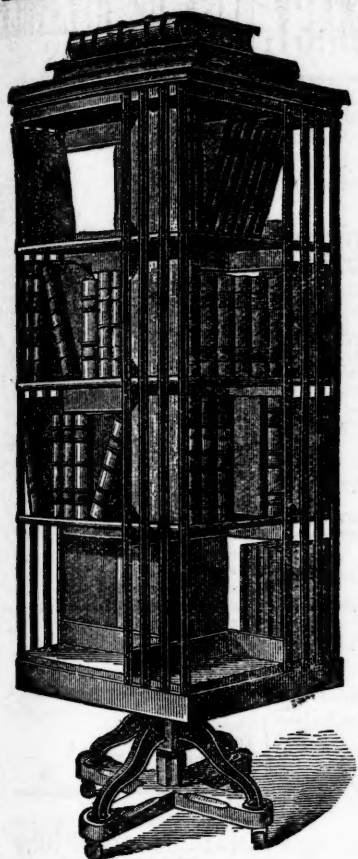
D. BRYSON DELAVAN, M.D., Professor of Laryngology and Rhinology; Laryngologist to the Demilt Dispensary.
JOSEPH WILLIAM GLEITSMANN, M.D., Professor of Laryngology and Rhinology; Laryngologist and Otologist to the German Dispensary.
OREN D. POMEROY, M.D., Professor of Otology; Surgeon Manhattan Eye and Ear Hospital; Ophthalmic Surgeon New York Infants' Asylum, and Consulting Surgeon to the Paterson Eye and Ear Infirmary.
HENRY N. HEINEMAN, M.D., Professor of General Medicine and Diseases of the Chest; Attending Physician to Mt. Sinai Hospital.
THOMAS R. POOLEY, M.D., Professor of Ophthalmology; Surgeon-in-Chief of the New Amsterdam Eye and Ear Hospital; Ophthalmic Surgeon to the Sheltering Arms; Consulting Ophthalmologist to St. Bartholomew's Hospital.
B. SACHS, M.D., Professor of Neurology; Consulting Neurologist to the Montefiore Home for Chronic Invalids.
L. EMMETT HOLT, M.D., Professor of Diseases of Children; Visiting Physician to the New York Infant Asylum; Consulting Physician to the Hospital for Ruptured and Crippled.
AUGUST SEIBERT, M.D., Professor of Diseases of Children; Physician to the Children's Department of the German Dispensary.
H. MARION SIMS, M.D., Professor of Gynecology; Gynecologist to St. Elizabeth's Hospital and New York Infant Asylum.
WILLIAM F. FLUHRER, M.D., Professor of Genito-Urinary Surgery; Surgeon to Mt. Sinai and Bellevue Hospitals.
HENRY C. COE, M.D., M.R.C.S. (Eng.), Professor of Gynecology; Attending Surgeon to New York Cancer Hospital; Assistant Surgeon to Woman's Hospital; Obstetric Surgeon to Maternity Hospital; Obstetrician to New York Infant Asylum; Gynecologist to Presbyterian Hospital (Out-door-Department).

REGULAR SESSION OF 1890-91, OPENED SEPTEMBER 15, 1890.

For further information
and for catalogue, address

JOHN A. WYETH, M.D., Secretary of the Faculty.

Or, WILLIS O. DAVIS, Clerk, 214, 216 and 218 East 34th St., New York City.



Wanamaker
Furniture, like
everything else
in the Big Store,
goes at bed rock
prices. Office
Furniture of
every sort.

Let this Re-
volving Book-
Case stand for
all: 2-shelf,
\$12; 3-shelf,
\$14; 4-shelf, \$16
— walnut, oak
or cherry.

John Wanamaker,
Philadelphia.

Alcohol and Opium Cases.
Private Apartments in the homes
of physicians (but one case in each)
with every convenience, and all
modern appliances for treatment.
Strict privacy guaranteed. Skilled
attendance. Address,
WILLIAM F. WAUGH, M. D.,
1725 Arch St., Philadelphia, Pa.

PRIVATE SANITARIUM,
For Medical and Surgi-
cal Treatment of Dis-
eases of Women.
DR. E. E. MONTGOMERY,
1818 Arch St., Phila.

I. G. ADAMS. C. J. ADAMS.
Israel G. Adams & Co.,
Real Estate & Insurance Agents,
1421 Atlantic Avenue, below Michigan,
Atlantic City, N. J.
TELEPHONE NO. 71, LOCK BOX, 52.

Read the
advertisements
on page iv.



SUPERIOR
Electro-Medical Apparatus.
Highest awards wherever ex-
hibited in competition.

SEND FOR Electro-Allopathic
Physiology, mailed free if you
mention The Times and Register.

ADDRESS,
JEROME KIDDER MFG. CO.,
820 Broadway, N. Y.
Liberal discount to Physicians.

Practical Electro-Therapeutics.

By William F. Hutchinson, M.D., Providence, R. I.

Dr. Hutchinson has been before the profession so long as a practical writer on electricity
that it may be accepted as a fact that this will be the very best book of its kind.

Price, n Cloth, \$1.50, postage prepaid.

PHYSICIANS SUPPLY CO., 218 East 34th Street, New York.

First American from the Fifth English Edition

—OF—

What to Do in Cases of Poisoning.

By DR. WILLIAM MURRELL, OF LONDON.

EDITED BY FRANK WOODBURY, M.D., OF PHILADELPHIA.

Price, in Cloth, \$1.00, postage prepaid,

PHYSICIANS SUPPLY CO., 218 East 34th Street, New York.

A Manual of the Minor Gynecological Operations and Appliances.

By J. HALLIDAY CROOM, M.D., F.R.C.P.E., F.R.C.S.E., ED.

First American edition from the Second English edition.

Revised and Enlarged; with Twelve Plates and Forty Wood-cuts.

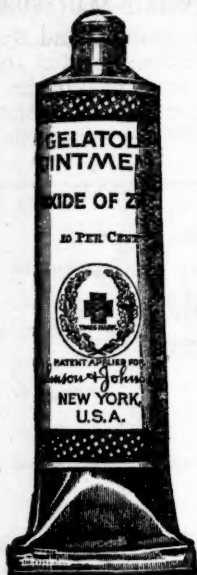
Edited by L. S. McMURTRY, M.D., of Danville, Ky.

The best, most practical, and most useful work on Gynecology ever published.

Price, in Cloth, \$1.50, postage prepaid.

PHYSICIANS SUPPLY CO., 218 East 34th Street, New York.

Improved Ointments.



In Collapsible Tubes only.
Not Greasy. Absorbable.



In Collapsible Tubes only,
With Nozzle.

Medicament carried to any
part of the body.

Perfectly bland, non-irritat-
ing base.

IMPROVEMENTS IN PHARMACY.

One of the recent advancements in the application
of remedies to the skin is the

IMPROVED OINTMENTS KNOWN AS GELATOLE OINTMENTS.

The Gelatole base is more absorbable than lard or
any other base, is a solvent for the combined drug,
giving increased action with slight antiseptic and
detergent properties.

Water-soluble and will not smear or run or soil the
clothing.

When applied and dusted with starch or toilet
powder a dry, clean, protective film is formed over the
skin.

They make a complete dressing for any condition.
An effective mode of applying drugs externally.

Leading dermatologists have adopted them, giving
their highest endorsement.

Thousands of physicians have adopted them, for
office use and dispensing, the form of receptacle being
so much superior to any other method.

GELATOLE * * * * * * EMULSION

For applying Medicaments to inflamed, denuded,
abraded, or membranous surfaces.

We have devised the perfectly bland and soothing
Gelatole Emulsion, in which we combine a full
line of such drugs as may be required.

They are put in collapsible tubes only, with a
nozzle, so that they may be applied to the eye, ear,
nasal organs, urethra, anus, uretus, etc.

Their action is most perfect. The method of using
is unsurpassed in point of convenience.

* * * * *

FOR TRIAL, WILL SEND AN AS-
SORTED CASE, CONTAINING
6 DOZEN, FOR \$12.00,
CHARGES PAID. ORDER
THROUGH JOBBER OR DIRECT.

* * * * *



Wooden Case for holding Ointments and Emulsions
convenient for dispensing.

LIST OF GELATOLE OINTMENTS.

U. S. P. STANDARD.

Acid Boracic.
Acid Carbolic.
Acid Carbolic and Camphor.
Acid Pyrogallic.
Acid Salicylic.
Antharobin.
Belladonna.
Bismuth, Sub. Iodide.
Bismuth Oxide.
Capsicum.
Cantharidal.
Copper Acetate.
Copper Sulphate.
Chrysarobin.
Creolin.
Creasote.
Crude Petroleum.
Eucalyptol.
Hydrastin.
Iodine.
Iodine Comp.
Iodoform.
Ichthyol.
Lead Oxide.
Menthol.
Mercury Ammoniated.
Mercury Biniodid.
Mercury Metallic.
Mercury Nitrate.
Mercury Red Oxide.
Mercury Yellow Oxide.
Naphthol.
Quinine.
Resorcin.
Resorcin and Zinc Oxide.
Sulphur.
Thapsia.
Tar.
Thymol.
Zinc Oxide.

LIST OF GELATOLE EMULSIONS.

Atropia.
Borated.
Camphorated.
Carbolized.
Cocaine.
Glycerine 95 per cent.
Hydrastin.
Iodoform.
Lead (Oxide).
Lead Subacetate.
Mercury Yellow Oxide.
Menthol.
Morphia.
Opium and Zinc.
Opium and Lead.
Zinc Sulphate.
Witch Hazel.

Gelatole Emulsion -OF- GLYCERINE

Is more
Convenient
and
Superior to
Subpositories.

JOHNSON & JOHNSON, New York, U. S. A

TO THE MEDICAL FACULTY.

We beg to call your attention to a new preparation of COD LIVER OIL, called **OLEO-CHYLE**.

FORMULA OF OLEO-CHYLE,

Peptonized Cod Liver Oil.....85 Min.
Pancreatine.....2 Grs.
Water.....25 Min.

Oleic Hypophosphites.....5 Grs.
Sodium Hyocholate..... $\frac{1}{4}$ Grs.
MIX.

DOSE: Two teaspoonfuls thrice daily at meal times. It is preferable to take OLEO-CHYLE in milk.

OLEO-CHYLE is an admixture of Cod Liver Oil with Pepsin and Pancreatine; it is Pure Norwegian Cod Liver Oil, perfectly digested with both Pepsin and Pancreatine in exactly the same manner

by the same length of time under the same conditions as to temperature etc., as oil would be subjected to by the human stomach and duodenum before being presented to the lacteals for absorption into the blood.

OLEO-CHYLE contains 70 per cent. of Pure "Lafoten" Norwegian Cod Liver Oil (which is a quality of oil containing the most iodine, as well as the richest in fat-producing and life-sustaining elements) which amount it is impossible to suspend artificially in any Emulsion.

OLEO-CHYLE contains the Hypophosphites combined with Oleic Acid in such form that they do not interfere with the digestion of the patient; in fact, physicians will find Oleo-Chyle to be

A DIGESTIVE AGENT IN ITSELF, it can therefore produce no eructation or nausea, and is pleasant to the taste.

OLEO-CHYLE is now in use by a large number of the Medical Profession, who, on trial of its merits, prefer it to Cod Liver Oil in any other form.

Any physician who has not received a sample of OLEO-CHYLE to test its merits will please apply to The

Geo. W. Laird Co., who will furnish one free of expense, also book containing several hundred letters from Physicians endorsing OLEO CHYLE in preference to any other preparation of Cod Liver Oil.



THE GEO. W. LAIRD CO., 247 Pearl Street, New York.

EVERY
DOCTOR, * * *
* DENTIST *
OR
* * * DRUGGIST
SHOULD HAVE AN

Alpine Fire Proof Safe.



We have a size 28x18x18 with Combination lock suitable for house or office use, and large enough for valuable papers, money, jewelry, etc.

Handsomely finished and ornamented.

PRICE \$30.00,

Delivered at office or residence.

Larger sizes equally low.

AGENCY: 907 Arch St., Phila.

Call and examine, or send us postal and agent will call on you with photographs, etc.

OUR FIVE-DOLLAR OFFERS.

We will send any one of the following combinations:

No. 1.
The Times and Register.....\$3.00
The Medical World.....1.00
And any \$2.00 Journal, Book or Instrument in America.....2.00
6.00

No. 2.
The Times and Register.....\$3.00
The Dietetic Gazette.....1.00
And either The Brooklyn Medical Journal, The Medical Mirror, or The Therapeutic Gazette }2.00
6.00

No. 3.
The Times and Register.....\$3.00
Minor Gynecological Operations. By Croom. Revised by McMurtry....1.50
Practical Electro-therapeutics. By Hutchinson...1.50
6.00

No. 4.
The Times and Register.....\$3.00
The Medical World.....1.00
" " " Visiting List.....1.50
(The only list published which can be presented as evidence of claim in a Court of Law.)
The Medical World Ledger of Monthly Balances.. .50
6.00

No. 5.
The Times and Register.....\$3.00
A Good Hypodermic Syringe.....1.50
A Clinical Thermometer.....1.50
(Both instruments warranted.)
6.00

No. 6.
The Times and Register.....\$3.00
The Earth Treatment. By Hewson.....1.00
What to Do in Cases of Poisoning. By Murrell. Revised by Woodbury.....1.00
The Self-lighting Pocket Lamp......50
A Good Urinometer.....1.00
6.50

SPECIAL OFFER.

The Times and Register.....\$3.00
A good reliable Time Keeper, Waltham or Elgin movement, in nickel open-face case, 7.50
We will send the above offer for \$10.00.
10.50

THE FIRST RAW FOOD EXTRACT.

*(Introduced to the Medical Profession in 1878.)***BOVININE**

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

CONTAINING 26 PER CENT. OF COAGULABLE ALBUMEN.

AN IDEAL FOOD.

PALATABLE.

KEEPS PERFECTLY.

BOVININE consists of the Juices of Lean Raw Beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to 26 per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

BOVININE is easily digested and COMPLETELY absorbed from the intestinal tract, thus furnishing an extremely valuable nutrient in Typhoid Fever, after surgical operations in the abdominal regions, in all diseased conditions of the intestinal tract characterized by ulceration or acute and chronic inflammation, and in diarrhoeic complaints.

BOVININE, containing as it does all the nutrient properties of lean raw beef in a highly concentrated form, furnishes to the Medical Profession a reliable and valuable aid to treatment in Phthisis, Marasmus of both young and old, in all wasting diseases, in continued fevers, and in supporting treatment.

BOVININE, on account of its BLOOD-MAKING PROPERTIES is especially of service after surgical operations, in cases of severe injuries attended with great loss of blood, and in the puerperal state.

BOVININE, for rectal feeding, is unsurpassed in excellence, having been used for weeks continuously with no irritation or disturbance resulting. The most satisfactory results from its use as an enema are obtained by adding to each ounce of **BOVININE** ten grains of Pancreatic Extract and two ounces of water. This should be well mixed and injected slowly. No preparation of opium is necessary in the enema.

SAMPLES will be furnished to any member of the Medical Profession free, carriage paid, upon application to the company.

PREPARED ONLY BY

THE J. P. BUSH MANUFACTURING CO.,

CHICAGO and NEW YORK, U. S. A.

Depot for Great Britain:

32 SNOWHILL, LONDON, E. C.

—SYRUP OF FIGS:—

—(SYR. FICI CAL.)—

In order to meet the almost universal demand for a safe, reliable and elegant liquid laxative, the

CALIFORNIA FIG SYRUP CO.,

OF

SAN FRANCISCO, CAL., - LOUISVILLE, KY., - NEW YORK, N. Y.,

is utilizing the delicious blue Fig of California in the preparation of

—SYRUP OF FIGS,—

an agreeable and effective laxative or purgative, according to the dose and manner of administration.

SYRUP OF FIGS is delightful to the taste, and may be taken by every one, from infancy to old age.

SYRUP OF FIGS does not debilitate, and is perfectly safe.

THE DOSE

As a purgative, for an adult, is from one-half to one tablespoonful, and may be repeated in six hours if required. As a laxative, one or two teaspoonfuls may be given at bed-time or before breakfast.

For children the dose may be regulated according to age and desired effect.

SYRUP

—OF—

FIGS

Is recommended and prescribed by prominent physicians in all sections of the United States, and gives general satisfaction.

In addition to the blue Figs of California, we use the juice of true Alexandria Senna, representing the laxative and purgative principles without its griping properties, also pure white sugar and an excellent combination of carminative aromatics.

Devoting our entire attention to the manufacture of Syrup of Figs after a thorough study of the results to be accomplished and of the best methods to produce a perfect laxative, and with complete manufacturing facilities especially adapted to the purpose, we are enabled to offer to the medical profession, in Syrup of Figs, a laxative which, though simple in itself, has not been produced in all its excellence by other parties, and we believe and trust that physicians will not permit imitations to be used when they prescribe Syrup of Figs (Syr. Fici Cal.).

SYRUP OF FIGS

IS MANUFACTURED ONLY BY THE

California Fig Syrup Company,

OF

SAN FRANCISCO, CAL., - LOUISVILLE, KY., - NEW YORK, N. Y.

It is sold to the drug trade in bottles of two sizes only: the smaller bottles containing full four ounces and the large size about ten ounces.

CONSTIPATION.

WHAT DO YOU PRESCRIBE FOR IT? Doubtless proper diet, exercise, good hygiene, laxatives, cathartics and alteratives as indicated.

CASCARA CORDIAL combines with carminatives the well-known tonic laxative virtues of Cascara Sagrada. No fact is more firmly established than that Cascara Sagrada will radically relieve chronic constipation. The Cordial is free from bitterness, and agreeable to the most sensitive palate.

GLYCERIN SUPPOSITORIES are an efficient method of relieving constipation, and invaluable to those who object to fluid medicine or to pills. These suppositories afford certain relief in Hæmorrhoids.

SYRUP TRIFOLIUM COMP. is an efficient and agreeably tasting combination of valuable vegetable alteratives. If it be desired to prescribe a laxative and alterative, the following is a simple and excellent prescription:

R *Syr. Trifolium Comp.,*
Cascara Cordial, ää oz. iv.
M. Sig.—Tablespoonful three times a day.

Descriptive literature of our products sent to physicians on request.

PARKE, DAVIS & CO.,
DETROIT & NEW YORK.